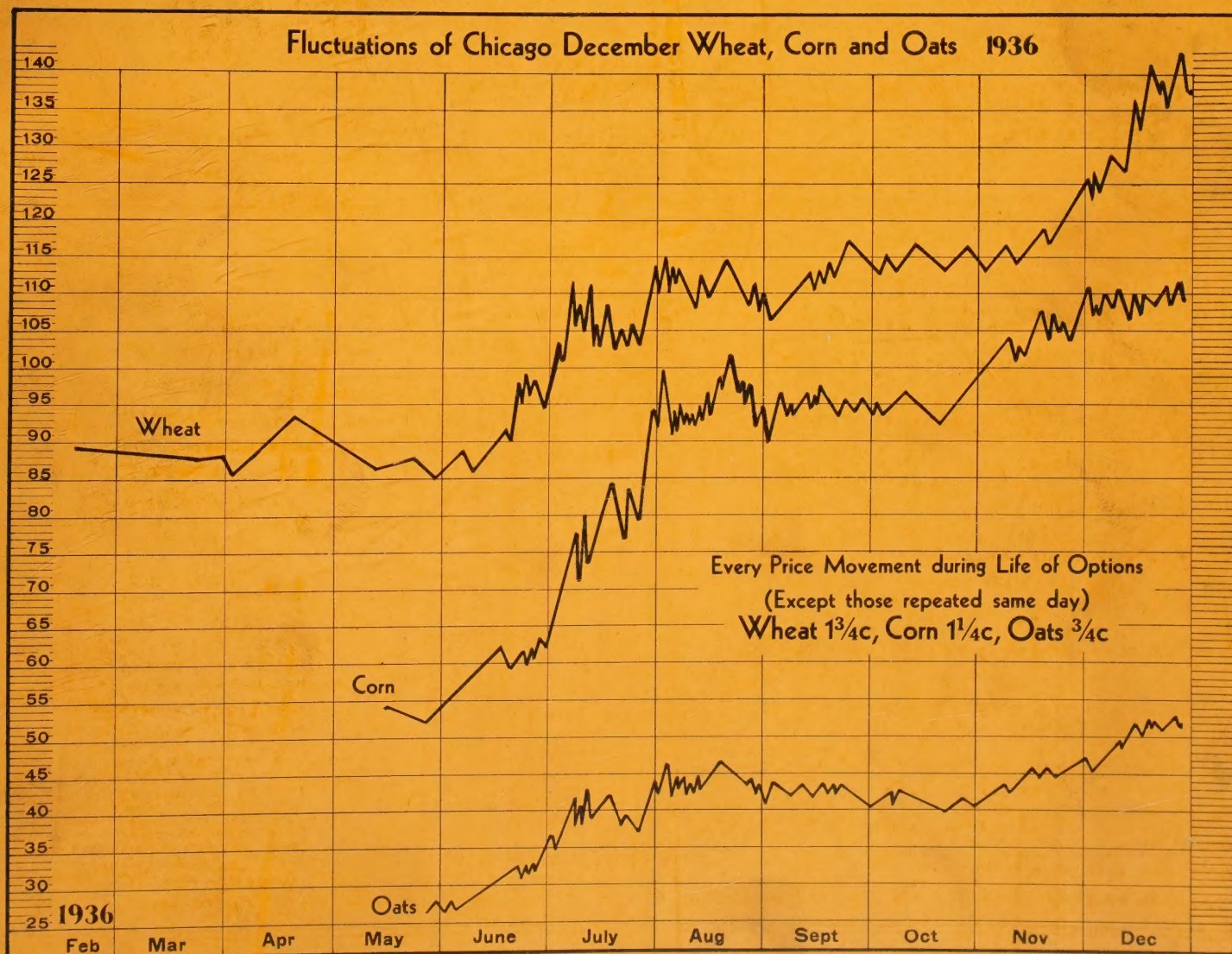


GRAIN & FEED JOURNALS

CONSOLIDATED

A Merger of Grain Dealers Journal, American Elevator & Grain Trade, Grain World and Price Current-Grain Reporter

HD
9836
.1
G72
v. 78-79
1937
WARE



For Review of the Life of the December Option, see Page 14.

Directory of the Grain Trade

In Organized Markets Only Members of the Local Grain Exchange Will Be Listed

HAVING YOUR name in this directory will introduce you to many old and new firms during the year, whom you do not know or could not meet in any other way. Many new concerns are looking for connections, seeking an outlet or an inlet, possibly in your territory. It is certain that they turn to this recognized Directory, and act upon the suggestions it gives them. The cost is only \$10 per year.

AMARILLO, TEXAS

Grain Exchange Members

J. N. Beasley Elevator Co., Inc., grain and seeds.*
Burrus Panhandle Elevators, public storage-mdsing.
Great West Mill & Elevator Co., millers, grain dealers.
Henneman Grain & Seed Co., seeds and grain.*
Kearns Grain & Seed Co., grain-field seeds.*
Stone, Lester, grain merchant.

BALTIMORE, MD.

Chamber of Commerce Members

Reer & Co., Inc., E. H., grain, hay, seeds.*

BUFFALO, N. Y.

Corn Exchange Members

American Elvtr. & Grain Div., recrs., shprs., consmts.*
Cargill, Incorporated, grain merchants.
McConnell, E. E., consignments, brokerage.*
Lewis Grain Corporation, consignments.
McKillop, Inc., J. G., consignments.
Provoost, S. E., grain and feed broker.*
Wood Grain Corp., consignments, brokerage.*

BURLINGTON, IOWA.

Member Chicago Board of Trade

Bartlett-Frazier Co., grain merchants.*

CAIRO, ILL.

Board of Trade Members

Thistlewood & Co., grain and hay.*

CEDAR RAPIDS, IOWA

Federal-North Iowa Grain Co., country run grain.*
Piper Grain & Mfg. Co., receivers and shippers.
Wildner Grain Co., grain merchants.*

CHICAGO, ILL.

Board of Trade Members

Bailey & Co., E. W., grain commission merchants.*
Bennett & Co., Jas. E., grain, provisions, stocks.*
Bartlett-Frazier Co., grain merchants.*
Dole & Co., J. H., recvrs.-comm. mchts.*
Harris, Burrows & Hicks, grain & prov., futures.*
Holt & Co., Lowell, commission, grain and seeds.
Hulburd, Warren & Chandler, grain commission mchts.*
Lamson Bros. & Co., grain, stocks, provisions.*
Norris Grain Co., grain merchants.*
Quaker Oats Co., grain merchants.
Stratton Grain Co., grain merchants.*

CLEVELAND, OHIO

Bailey, E. L., shpr. grain, mill'd. oil and c.s. meal.*
The Cleveland Grain Co., home office.*

COLUMBUS, OHIO

Cummings & McAlister, brokers grain, feed, oil.
Dill Grain Co., L. J., shippers grain-feed.
Maney, M. R., grain and feed broker.

CINCINNATI, OHIO

The Early & Daniel Co., grain and feed service.*

DALLAS, TEXAS

Crouch Grain Co., J. C., buyers wheat, corn, oats.*

DECATUR, ILL.

Baldwin Elevator Co., grain merchants.*
Evans Elevator Co., grain, Chicago B. of T. Members.*
Hight Elevator Co., grain merchants.*

DENVER, COLO.

Grain Exchange Members

Ady & Crowe Merc. Co., The, recvrs. shprs., consignments.*
Houlton Grain Co., grain merchants.*
Intermountain Elevator Co., recvrs. shprs. consignments.*

ENID, OKLA.

Board of Trade Members

Fenquay Grain Co., optrs. country elvtrs., gr. mdsg.*
General Grain Co., term. elvtr., gr. merchants.
Johnston, W. B., wheat, coarse grains, field seeds.*
Salina Terminal Elvtr., optrs. Southwest Term. Elvtr.

*Members Grain & Feed Dealers National Assn.

FORT DODGE, IOWA

Bulphitt Grain Co., grain merchants.*
Davis Bros. & Potter, grain shippers.*

FORT WORTH, TEXAS

Grain and Cotton Exchange Members

Bennett & Co., Jas. E., grain, stocks, provisions.
Brackett Grain Co., brokerage, consignments.*
Carter Grain Co., C. M., brokerage and consignments.*
Ft. Worth Elvts. & Whsg. Co., consignments, stge.
Lone Star Elevators, public storage-merchandising.
Rogers Co., E. M., brokerage and consignments.*
Smith-Ingraham Grain Co., domestic-export grain.
Strader, Ralph, brokerage, consgnts., merchants.
Transit Gr. & Comm. Co., consignments-brokerage.*

GALVESTON, TEXAS

Shaw, Thomas F., grain exporter.*

GREENVILLE, OHIO

Hall Grain Co., The, wholesale grain.

HUTCHINSON, KAN.

Farmers Co-Operative Comm. Co., grain storage.
Smoot Grain Co., oper. Grain Belt Elevator.*

INDIANAPOLIS, IND.

Board of Trade Members

Cleveland Grain Co., grain commission.*

KANSAS CITY, MO.

Board of Trade Members

Davis-Noland-Merrill Grain Co., grain mchts.*
The Kansas Elevator Co., mlg. wheat, corn, oats, barley.*
Meservey-O'Sullivan Grain Co., gr. mchts. congnts.*
Moore-Seaver Grain Co., grain receivers.*
Mid-Continent Grain Co., grain merchants-consignments.*
Scouler-Bishop Grain Co., consignments.*
Vanderslice-Lynds Co., Kafir, millo, consignments.*
Wolcott & Lincoln, Inc., consignments.*

LOUISVILLE, KY.

Board of Trade Members

Zorn & Co., S., receivers and shippers.*

MARYSVILLE, OHIO

Scott & Sons, O. M., soy beans.

MEMPHIS, TENN.

Merchants Exchange Members

Buxton, E. E., broker and commission merchant.*

MILWAUKEE, WIS.

Grain & Stock Exchange

Stratton Grain Co., grain merchants.*

MINNEAPOLIS, MINN.

Chamber of Commerce Members

Bunge Elevator Corp., grain merchants.
Cargill, Incorporated, milling wheat.*
Hallet & Carey Co., grain merchants.
Hiawatha Grain Co., screenings.*
McGuire Company, Arthur, shprs. b'wheat, m/wht.*
Scroggins Grain Co., grain merchants.*

NEW YORK, N. Y.

Produce Exchange Members

Stratton Grain Co., grain merchants.*

OMAHA, NEBR.

Grain Exchange Members

Bartlett-Frazier Co., grain merchants.*
Bell-Trimble Co., recvrs. and shippers.*
Updike Grain Corp., receivers & shippers.*

PAXTON, ILL.

Watson Grain Co., corn & oats brokers.*

PEORIA, ILL.

Board of Trade Members

Bowen Grain Co., H. D., grain commission.*
Cole Grain Co., Geo. W., receivers and shippers.
Dewey & Sons, W. W., grain commission.*
Feltman Grain Co., C. H., grain commission.
Luke Grain Co., grain commission.*
Miles, P. B. & C. C., grain commission.*

PHILADELPHIA, PA.

Commercial Exchange Members

Markley, P. R., grain broker.*

PITTSBURGH, PA.

Members Grain and Hay Exchange

Rogers & Co., Geo. E., receivers, shippers.*

PONTIAC, ILL.

Balbach, Paul A., grain buyers, all markets.

ST. JOSEPH, MO.

Grain Exchange Members

Archer-Daniels-Midland Co., grain merchants.*
Bartlett-Frazier Co., grain merchants.*
Dannen Grain & Mfg. Co., grain mchts.-consignments.
Stratton Grain Co., grain merchants.*

ST. LOUIS, MO.

Merchants Exchange Members

Anheuser-Busch, Inc., feed grains.*
Ballard-Messmore Grain Co., consignments-futures.*
Fuller-Woolbridge Com. Co., gr. & millets all kinds.*
Langenberg Bros. Grain Co., grain commission.*
Morton & Co., grain commission.*
Mullally-Evans Co., everything in grain.*
Nanson Commission Co., grain commission.*
Schwarz Grain Co., grain dealers, consignments.*

SALINA, KANS.

Eberhardt-Simpson Grain Co., general mchts.*
Smoot Grain Co., oper. Salina Terminal Elevator.*

SAN ANTONIO, TEXAS

King Co., Douglass W., sorghums, corn, s/corn, cane sd.*

SIDNEY, OHIO

Custenborder & Co., E. T., grain shippers.*
Wells Co., The J. E., wholesale grain.

SIOUX CITY, IOWA

Grain Exchange Members

Flanley Grain Co., also office at Omaha, Neb.*
Terminal Grain Corporation, grain merchants.*

TOLEDO, OHIO

Southworth & Co., E. L., consignments, futures.

TOPEKA, KANSAS

Derby Grain Co., gen'l grain merchants.*

VERNON, TEXAS

Martin-Lane Grain Co., wholesale grain.*

WELLINGTON, KANS.

Wolcott & Lincoln, Inc., optrs. Wellington Term. Elvtr.

WICHITA, KANS.

Board of Trade Members

Adair-Morton Grain Co., wheat, corn, oats, barley.*
Craig Grain Co., wheat specialists, consignments.
Harold-Wallis Grain Co., milling wheat specialists.
Smith-McLinden Grain Co., wheat, corn, grains, feeds.
Wallingford Grain Corp., Sam P., grain and storage.
Wichita Terminal Elvtr. Co., gen'l elvtr. business.*

WINCHESTER, IND.

Goodrich Bros. Co., wholesale grain and seeds.*

Grain & Feed Journals Consolidated, a merger of Grain Dealers Journal (Est. 1898), American Elevator & Grain Trade (Est. 1882), Grain World (Est. 1928), and Price Current-Grain Reporter (Est. 1844). Published on the 2nd and 4th Wednesday of each month in the interest of progressive wholesalers in grain, feed, and field seed. 332 South La Salle Street, Chicago, Illinois, U. S. A. Price \$2.00 per year. 25c per copy. Entered as second class matter November 27, 1930, at the postoffice at Chicago, Ill., under the act of March 3, 1879. Vol. LXXVIII. No. 1. January 13, 1937.

Use Universal Grain Code and Reduce Your Telegraph Tolls

Chamber of Commerce
Members**MINNEAPOLIS**Chamber of Commerce
Members

COAST TO COAST GRAIN SERVICE

CARGILL

Headquarters

INCORPORATED
MINNEAPOLIS, MINN.
761 Chamber of CommerceCountry Offices
Fairmont, Minn.
Marshall, Minn.
Williston, No. Dak.
Crystal, No. Dak.
Sioux Falls, So. Dak.
Lincoln, Neb.Terminal Offices
Duluth, Milwaukee, Chicago, Green Bay, Cedar Rapids,
Toledo, Buffalo, Albany, New York, Boston, Omana,
Memphis, Kansas City, St. Louis, Portland, Spokane,
Seattle, San Francisco, Winnipeg, Man.; Montreal, Que.

Cargill, Incorporated, Seed Division, Box 64, Minneapolis

HALLET & CAREY CO.
Grain Merchants

Minneapolis Duluth Winnipeg

When writing advertisers men-
tion Grain & Feed Journals Con-
solidated. By so doing you help
both yourself and the publication.**CIPHER CODES**We carry the following cipher codes in stock:
Universal Grain Code, board cover...\$1.00
Robinson's Cipher Code, leather..... 2.50
Dowling's Grain Code..... 3.00
Miller's Code (1917), cloth..... 2.00
Cross Telegraphic Cipher (10th edition) 4.00
Peerless Export Grain Code.....85.00
A. B. C. Code, 5th Ed., with sup.....20.00
Baltimore, Export Cable Code.....15.00
Bentley's Complete Phrase Code.....10.00
Riverside Flour, Improved (6th Ed.)...12.50
Calpack Code (1923).....10.00

All prices are f. o. b. Chicago

GRAIN & FEED JOURNALS
Consolidated

332 S. La Salle St. Chicago, Ill.

WHEAT

AND ALL OTHER GRAINS

*Any Grade—Any Quantity—Any Time***BUNGE ELEVATOR CORPORATION**
MINNEAPOLIS, MINN.Grain Exchange
Members**DENVER**Grain Exchange
Members**THE ADY & CROWE MERCANTILE CO.**

Denver, Colorado

Receivers and Shippers — Grain and Beans
Consignments Solicited**THE HOULTON GRAIN CO.**

Grain Merchants

DENVER, COLORADO

Upon readers patronage of its
advertisers depends the success
of Grain & Feed Journals Con-
solidated. Mention it. Thank
you.**Intermountain Elevator Company**and FORT MORGAN MILLS, INC. DENVER, COLORADO
Receivers, Shippers, and Elevator Operators**CONSIGNMENTS SOLICITED**Ample storage, constant stocks, and country connections enable us to give prompt,
efficient service, and dependable quality on coarse grains, and protein milling wheats.Corn Exchange
Members**BUFFALO**Corn Exchange
Members**Wood Grain Corp.**
CONSIGNMENTS—BROKERAGE
BUFFALO, N. Y.**American Elevator & Grain Division**

Russell Miller Milling Company

RECEIVERS, SHIPPERS AND ELEVATOR OPERATORS

CONSIGNMENTS SOLICITED

Our System of Terminal Elevators, enables us to give prompt service and reliable quality
on coarse grains, durums and protein milling wheats.**E. E. McCONNELL**
Consignments — Brokerage
BUFFALO, N. Y.**Lewis Grain Corp.**

A good firm to consign to

Corn—Oats—Soft Wheat—Barley

BUFFALO

NEW YORK

J. G. McKILLEN, INC.

RECEIVERS

Consignments a Specialty

BUFFALO

NEW YORK

Board of Trade
Members**CHICAGO**Board of Trade
Members**LAMSON BROS. & CO.**

2200 Board of Trade

Established 1874

Chicago, Ill.

*"63 years of continuous service in the grain trade."*GRAIN - STOCKS
BONDS - COTTON
BUTTER - EGGS
PROVISIONS**E. W. BAILEY & CO.**

COMMISSION MERCHANTS

GRAIN, SEEDS AND PROVISIONS

1142-44 Board of Trade, CHICAGO

JAMES E. BENNETT & CO.

— ESTABLISHED 1880 —

ASK FOR BIDS

WHEAT—CORN—BARLEY
RYE—OATS—SOY BEANS

GRAIN COMMISSION MERCHANTS AND STOCK BROKERS—332 So. La Salle St., CHICAGO

MEMBERS ALL PRINCIPAL COMMODITY AND SECURITY EXCHANGES

CONSIGNMENTS AND FUTURES ORDERS SOLICITED IN ALL PRINCIPAL MARKETS

MINNEAPOLIS
Chamber of CommerceST. LOUIS
Merchants ExchangePEORIA
Board of TradeCAIRO
Board of TradeINDIANAPOLIS
Board of TradeKANSAS CITY
Board of Trade**THE QUAKER OATS COMPANY**

BUYERS OF

Oats Corn Wheat BarleyCedar Rapids,
Ia.Ft. Dodge,
Ia.Akron,
OhioSt. Joseph,
Mo.

CHICAGO, ILLINOIS

**Harris, Burrows
& Hicks**Siebel C. Harris
Mgr. Grain Department*We Specialize in
Hedging and
Spreading Operations*

Members Principal Exchanges

135 So. La Salle St.
Chicago

Minneapolis

St. Paul

BARTLETT FRAZIER CO.

GRAIN MERCHANTS

Receivers—Buyers—Shippers—Exporters

111 W. JACKSON ST., CHICAGO

HULBURN, WARREN & CHANDLER

GRAIN COMMISSION MERCHANTS

208 South La Salle Street, Chicago

Arthur J. Pollak, Mgr., Cash Grain Dept.
Phone State 9760Consignments Solicited—Bids "To-Arrive"
Ask for our Shipping Prices

Say you saw it in the

JournalWhen you write our advertisers
Thanks*Ship Your Grain or Seeds and Send Your Orders to***J. H. DOLE & COMPANY**

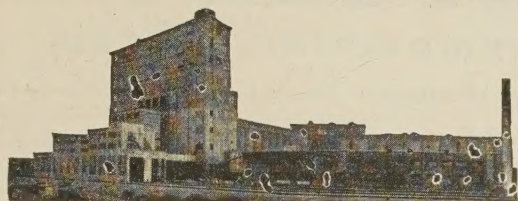
RECEIVERS and COMMISSION MERCHANTS

CHICAGO

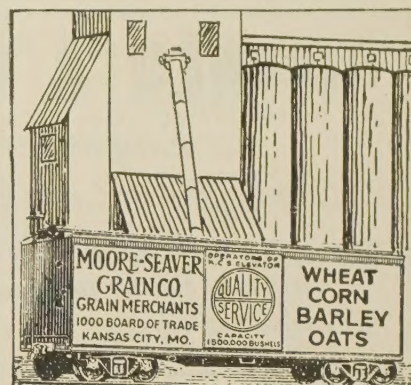
PEORIA

ST. LOUIS

**Use Universal Grain Code
and Reduce Your Telegraph Tolls**

Board of Trade
Members**KANSAS CITY**Board of Trade
Members**DAVIS-NOLAND-MERRILL GRAIN CO.**Board of Trade
Kansas City, Mo.Operating
SANTA FE ELEVATOR "A"
10,200,000 BUSHELS
Modern Fireproof Storage

Ask for our bids on Wheat, Corn, Oats, Rye and Barley for shipment to Kansas City and the Gulf—Special Bin Storage Furnished at Regular Storage Rates.

Board of Trade
Members**PEORIA**Board of Trade
Members**LUKE** Grain Co., Inc.
Solicits Your Peoria Business
Consign Your Corn to Us
PEORIA, ILLINOISRECEIVERS GRAIN SHIPPERS
• W. W. **DEWEY** & SONS •
CONSIGN TO DEWEY
PEORIAP. B. and C. C.
MILES
Est. 1875—Inc. 1910
PEORIA, ILLINOIS
Handling Grain on Commission
Our Specialty**RECEIVERS, SHIPPERS AND BROKERS****Future Trading**Upon Organized Commodity
Markets

by G. Wright Hoffman

Reviews the development and extent of future trading in the various commodities and markets; explains effect of future trading on price stabilization and operation of future markets. Cloth bound, 500 pages, price \$5.00, plus postage. Weight, 3 lbs.

Grain & Feed Journals
Consolidated

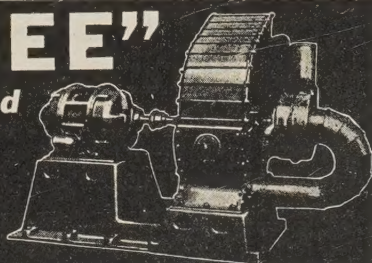
332 S. LaSalle St. Chicago, Ill.

LANGENBERG BROS. GRAIN COMPANY

Established 1877

ST. LOUIS NEW ORLEANS

There is no better time to advertise than the present. Better start before your competitor. Write the JOURNAL today.

E. H. BEER & CO., INC.Successors to
Chas. England & Co., Inc.
GRAIN—HAY—SEEDS
Commission Merchants
308-310 Chamber of Commerce, Baltimore**Nanson Commission Co.****Grain—Hay—Seeds**
202 Merchants Exchange Bldg.
ST. LOUIS, MO.**Everytime** you mention the Grain Dealers Journal to an advertiser, you encourage him to make good on his advertised claims.**"JAY-BEE"****World's Standard
Grinder—for
Capacity
Durability
Economy****Over 20,000 in Use All Over the World**

Sizes from 12 H. P. to 125 H. P. for Belt, V-Belt and Direct-connected drives.

Molasses Mixers—Corn Crackers—Batch Mixers

Write for detailed description, prices, terms, etc.

J. B. SEDBERRY, INC. Dept. 76, Franklin, Tenn.—Utica, N. Y.
Jay Bee Sales Co., Kansas City, Mo.**Don't Breathe DUST
Wear a DUPOR...
New - Automatic - Rubber
RESPIRATOR**

Maximum Efficiency because of DOUBLE FILTER CHAMBERS! (Patent 2,000,064.) Two-in-one protection at lower cost than old types! Revolutionary construction, light weight, collapsible to fit the pocket! Easy breathing—clear vision—with unique Face Cloth for comfort. Why Breathe Dusts, Paint Sprays, Fumes, etc. ORDER YOUR "DUPOR" TODAY! PRICE \$18.00 per dozen. Extra Pads, 1c each.

**H. S. COVER** 1937 Chippewa St.
South Bend, Ind.• Send \$1.50 Today
for SAMPLE!

GRAIN ELEVATOR BUILDERS

HORNER & WYATT*Engineers*Designers of Grain Elevators
and Feed Mills

Power Problems a Specialty

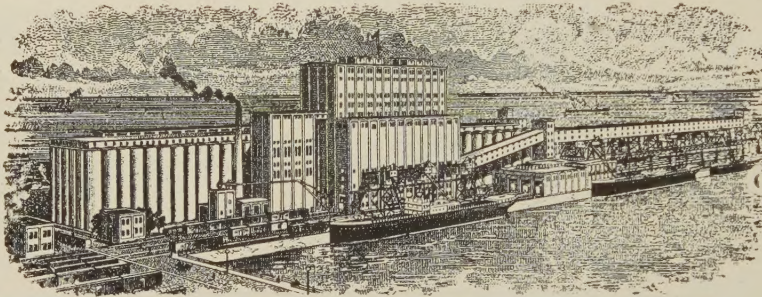
470 BOARD OF TRADE

KANSAS CITY, MO.

Z E L E N Y
Thermometer System*Protects Your Grain*Estimates cheerfully given.
Write us for catalog No. 6.**Zeleny Thermometer Co.**

542 S. DEARBORN ST.

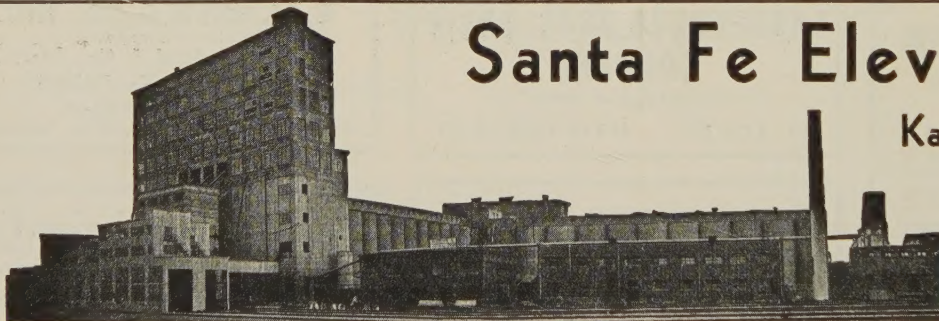
CHICAGO, ILL.

Capacity
5,000,000
Bushels*Equipped with
Four Stewart
Link-Belt
Grain Car
Unloaders*

PENNSYLVANIA RAILROAD ELEVATOR AT BALTIMORE

JAMES STEWART CORPORATION
ENGINEERS AND CONTRACTORS

FISHER BUILDING—343 S. DEARBORN ST., CHICAGO, ILLINOIS

H. G. ONSTAD
PRES.-GEN. MGR.
Phone Harrison 8884L. V. HEUSER
VICE-PRES.**Santa Fe Elevator "A"**

Kansas City, Kans.

Capacity
10,500,000 Bushels**JOHN S. METCALF CO.***Grain Elevator Engineers and Constructors*

105 W. Adams St., Chicago

460 St. Helen St., Montreal

837 W. Hastings St., Vancouver, B. C.

12-15 Dartmouth Street, London, England

**SKF**
BALL BEARINGSPreferred in the
Grain Elevator Industry
SKF INDUSTRIES, INC.
FRONT ST. & ERIE AVE.
PHILADELPHIA, PA.★ **CLEAN, GRADED &**
★ **TREATED SEED GRAINS**★ pays big dividends in bigger and better
★ crops. Cleaning, grading and treating
★ machinery in an elevator brings cus-
★ tomers for this service who return to
★ sell their grain.

★ Write us for literature on low cost machines

★ **WHITE★STAR★COMPANY**
★ Wichita, Kansas

GRAIN ELEVATOR BUILDERS

CONCRETE

CONSTRUCTION OF
Grain Elevators—Feed Mills—
Flour Mills—Coal Pockets
RYAN CONSTRUCTION CO.
503 Keeline Bldg. Omaha, Neb.

WE SPECIALIZE

in Modernizing Country Elevators
Our recommendations will cost you nothing. When do you wish us to submit estimates on remodeling your grain-handling facilities?
THE VAN NESS CONSTRUCTION CO.
Grain Exchange Omaha, Neb.

A. Clemons Construction Co.
SOUTH SOLON, OHIO

Designers and Builders
Concrete Grain Elevators, Coal Pockets,
Feed Mills

HOGENSON

Construction Co.
Designers and Builders
Elevators, Feed Mills, Warehouses
REMODELING
Corn Exchange Bldg. MINNEAPOLIS, MINN

T.E. IBBERTSON CO.

GRAIN ELEVATOR BUILDERS

Feed Mills Coal Plants
Repairing and Remodeling

MINNEAPOLIS MINNESOTA

WE BUILD GRAIN STORAGES

29 Years' Experience
Send us your inquiries
POLK GENUNG POLK COMPANY
Fort Branch, Indiana

WE REPAIR

Concrete Structures and Moisture
Proof by
GUNTUX METHOD
Cement Gun Construction Co.
537 S. Dearborn St. Chicago, Ill.

To BUY or SELL RENT or LEASE an ELEVATOR

Place an adv. in the "Wanted" or
"For Sale" columns of the GRAIN
& FEED JOURNALS, of Chicago.
It will bring you quick returns.

A BOSS LOADER

- raises the grade
- loads car evenly
- no shoveling

Pneumatic Grain Machinery Co.
DAYTON, OHIO



Concrete Costs No More

Let us prove it.
Plans and estimates
on your needs made
cheerfully.

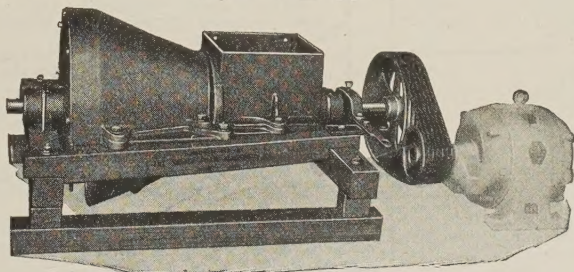
CHALMERS & BORTON

Designers & Builders
28 E. 1ST ST. HUTCHINSON, KAN.

Think that times are getting back to
normal and that we can all make some
money.—J. S. Foster, mgr. Farmers Co-op.
Elvtr. Co., Firesteel, S. D.

Sidney Corn Shellers

Hyatt Equipped



All shellers are adjustable for different kinds and
sizes of corn.

Made in five sizes 80 to 1,500 bushels per hour.
Available in several styles.

Be prepared to do a bigger and better shelling
business. These shellers cost so little and do so much
you can't afford to be without one.

Send for descriptive literature.

The Sidney Grain Machinery Co.
Sidney, Ohio

Complete Equipment for Grain Elevators
and Feed Mills

All Cleaners

can have screens
energized to
15 to 25% greater capacity

By removing your out of date eccentrics and replacing
with the "Eureka-Buhler" Eccentricless Drive your
cleaner will have "Super Agitation," that "magical"
intensity of screen activity every "eccentric" fails to
produce and—also—you will have an unchanging
standard of finer, less wasteful separations—with 15
to 25% capacity increase. Power will be cut one-half.
Upkeep cost will disappear as this "Eccentricless"
Drive being frictionless—is wearless. 3,000 in use—
3,000 surprised owners.



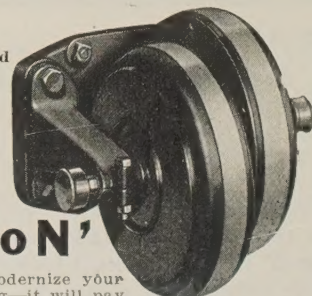
Patented

'Super- Agitation'

Ask for catalog. Modernize your
cleaner—and cleaning—it will pay
to do so.

Sole Manufacturers

S. HOWES CO., Silver Creek, N. Y.



Wanted and For Sale

The rate for advertisements in this department is 25 cents per type line each insertion

ELEVATORS FOR SALE

NEBRASKA—Two elevators operating at a profit. George L. Bruner, Loretto, Nebraska.

WELLINGTON, KANS.—10,000 bu. iron clad elevator for sale; coal bins and sheds, on Rock Island; good farming section. Farmers Elevator Co., Wellington, Kans.

MINNESOTA—125,000 bus. iron clad frame cleaning and transfer elevator for sale, electric power, fast handling, good cleaner equipment, Northwestern road, a good transit point, and in good barley territory. Real bargain price. Banner Grain Co., Minneapolis, Minn.

ARKANSAS—Small grain elevator, capacity 10,000 bushels; one story warehouse, 60 by 150 ft. one large hay warehouse. All located on Frisco tracks, in the best town in Arkansas. An ideal distributing point for some large flour mill. If interested, write Southern Grain & Produce Co., W. W. Duckett, Mgr., Hope, Arkansas.

IOWA—50,000 bu. concrete elevator; 300 bbl. mill; large two-story brick warehouse, concrete foundation. Good wheat crop, good trade territory. Will consider immediate cash offer of \$15,000 for the entire property, including equipment and land. Replacement value over \$100,000. Will gladly show property. Address Martens & Ketels Milling Co., Sioux City, Iowa.

CENTRAL ILLINOIS—125,000 bu. modern cribbed and frame, iron-clad elevator on two railroads in the heart of the Corn Belt. Large production of soybeans and elevator is suitably located and constructed that it could be made into a soybean mill. Has shown a consistent profit. A 500,000 bu. per annum station. Address 76N1, Grain & Feed Journals, Chicago, Ill.

BARGAIN IF TAKEN AT ONCE—Some one is always looking for an elevator at a good grain point and reads these ads just like you're doing now, so if you wish to dispose of your present property, enlarge your present interests, or embark in the grain business, USE these columns to your best advantage just as others are doing. WE WILL assist you in the composition of copy free. We are in business to be of service to YOU. There is no wrong time to put an ad in the columns of the Journal. TRY IT.

ELEVATORS WANTED

IOWA ELEVATOR wanted, in good grain territory. Give full particulars. Address 76R7, Grain & Feed Journals, Chicago, Ill.

BUSINESS OPPORTUNITIES

ELEVATOR AND FEED PLANT FOR SALE Cleveland, Ohio, on NYC R. R., modern concrete house; complete mixing and grinding equipment; a bargain.

Grain Storage, Inc.
2520 Market Avenue Cleveland, Ohio

HELP WANTED

WANTED—Salesmen to handle best line of farm salt to elevators and stores on commission basis. For particulars, write Box 328, Saginaw, Mich.

SITUATION WANTED

EXPERIENCED MANAGER wants position; successful record; references. Address 78A9, Grain & Feed Journals, Chicago, Ill.

POSITION WANTED as manager of country grain station; 15 years experience grain and all sidelines; can make change at once. Address 78A4, Grain & Feed Journals, Chicago, Ill.

COMPETENT elvtr. mgr.; 20 years experience, wants change location; handle side lines; can produce results; reference A-1. Prefer Iowa or adjoining states. For details or personal interview write 78A2, Grain & Feed Journals, Chicago.

POSITION WANTED as manager of grain elevator; 10 years' experience in grain business, 5 years as manager; now employed as manager, but have good reasons for wanting to make a change; 29 yrs. of age; can give good references. Write, 76Z1, Grain & Feed Journals, Chicago, Ill.

MISCELLANEOUS

SPECULATIVE GUIDE

Successful Systems, Rules—Grain, Stocks, for traders—public. \$2.00; two books or more 30% off. Agents Wanted.

F. J. Turner, 334 Sherman St., Chicago, Ill.

SAMPLE ENVELOPES

SAMPLE ENVELOPES—SPEAR SAFETY—for mailing samples of grain, feed and seed. Made of heavy kraft paper, strong and durable; size 4½x7 inches. Have limited supply to sell at \$2.35 per hundred, or 500, \$10.00 plus postage. Sample mailed on request. Grain & Feed Journals, 332 S. La Salle St., Chicago, Ill.

Your RADIO MARKET Record

A boon to the grain dealer who keeps a convenient, permanent record of market quotations for ready reference.

This form provides convenient spaces for hourly quotations on Wheat, Corn, Oats, Rye, and Barley. A week on a sheet, and a year's supply of sheets in a book.

Order Form CND 97-5.

Price, \$1, plus postage. Shipping Weight, 1 lb.

Grain & Feed Journals
Consolidated

332 S. La Salle St. Chicago, Ill.

Universal Grain Code

Compiled especially for use by the Grain and Milling Trades.

Reduce your telegraph tolls. Keep your business to yourself. Prevent expensive errors.

Its 146 pages contain 13,745 code words for expressions used in the grain trade, printed on bond paper and bound in black flexible leather. Size 7x4½ inches. Price, leather, \$3.00; paper, \$1.00, f. o. b. Chicago.

GRAIN & FEED JOURNALS
Consolidated

332 S. La Salle St., Chicago, Ill.

KEEP POSTED

GRAIN & FEED JOURNALS CONSOLIDATED

332 So. La Salle St., Chicago

A merger of Grain Dealers Journal, American Elevator & Grain Trade, Grain World and Price Current-Grain Reporter.

Gentlemen:—In order to keep us posted regarding what is going on in the grain and feed trades outside our office, please send us the *Grain & Feed Journals* twice each month. Enclosed find Two Dollars for one year.

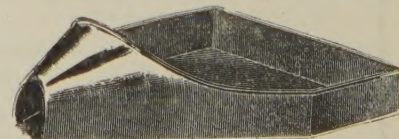
Name of Firm.....

Capacity of Elevator

Post Office

State

SAMPLE PANS



Formed by bending sheet aluminum, reinforced around top edge with copper wire. Strong, light, durable. The dull, non-reflecting surface of aluminum will not rust or tarnish; assists users to judge of the color and to detect impurities.

Grain Size, 2½x12x16½", \$2.00; Seed Size, 1½x9x11", \$1.65, at Chicago.

GRAIN & FEED JOURNALS
Consolidated

332 So. La Salle St., Chicago, Ill.

MACHINES FOR SALE

CORN CUTTER & Grader—has motor—used very little. 76D6 Grain & Feed Jnrls., Chicago.

HAMMER MILL with 25-h.p. motor and all attachments. Priced to sell. Write 76D7 Grain & Feed Journals, Chicago, Ill.

FEED MIXER for sale, has motor, and a late machine. Need space. Will sacrifice. Write 76D5 Grain & Feed Journals, Chicago, Ill.

FEED MIXER—one ton—floor level feed—has motor—good as new. Write 76D8 Grain & Feed Journals, Chicago, Ill.

FOR SALE—24" D. H. Mill; equipped with two 20 h.p. motors; priced reasonable. Steward Grain and Lumber Co., Steward, Illinois.

75 HP Waukesha Engine	\$350
45 HP Waukesha Engine	\$225
Fairbanks-Morse motor with starter	\$190
Millers Exchange, 2229 Fox Ave., Madison, Wis.	

CORN SHELLERS; 15 hp motor; 10 hp type Z Fairbanks engine; 5"x10" bucket elevator; 4 bu. automatic scale; 500 bu. hopper scale. Truck dump. P. O. Box 212, Reynolds, Ind.

FOR SALE—Second hand feed and elevator machinery; Tag-Heppenstall Moisture Meters; Bolinder Diesel Engines. Weaver Sales Corp., Corn Exchange, Minneapolis, Minn.

FOR SALE

30 hp Papec Mill complete with motor
No. 4 Monitor Receiving Separator
No. 122 Standard Seed Cleaner
50 hp Type Y, F-M Engine
26" Bauer Attrition mill with 2, 25 hp motors
½ ton Vertical Feed Mixer
½ ton Horizontal Feed Mixer
Send for complete list of rebuilt machinery.
Sidney Grain Machinery Co.
Sidney, Ohio

MACHINERY FOR SALE

1—Special 1000 lb. Miracle Batch Mixer
1—32" Dia. Black Iron Sacking Bin
1—Keck, 38" Alfalfa Breaker Wood Frame
1—Barnard & Leas #8778 Double Roller Mill, 9"x30" Rolls, LePage cut, Style A drive, Style #3 auto shaker feed.
1—Williams #C-157 Pulverizer, Belt Drive, #5762 C.I. 30" Dia. Housing.
1—Eureka #453A Cracked Corn Separator, mfgd. by S. Howes Co.
1—Cyclone G. I. Dust Collector, 72" Dia x 54" High Cylinder, 12" Discharge outlet.
DIAMOND MILLS
Evansville, Indiana.

MACHINES WANTED

WE ARE IN NEED of one 4,000 to 5,000 or two 2,000 bu. capacity direct heat grain driers; also one 80 to 110 and one 200 to 250 HP natural gas engines; two automatic elevator scales; one receiving separator; three elevator conveyors and some other machinery that may be needed to build new elevators. Miracle Feed Mill, Bishop, Texas.

MOTORS—GENERATORS**SAVE on MOTORS and GENERATORS**

Write for new Free Catalog of guaranteed rebuilt Motors, Generators, Pumps, Compressors, etc. We Save you Half. Your idle equipment taken in trade. Specials in totally enclosed motors, as well as other Bargains.
Chicago Electric Co., 1331 W. 22d St., Chicago.

ELECTRICAL MACHINERY

Large stock of motors and generators, A.C. and D.C., new and rebuilt, at attractive prices. Special bargains in hammermill motors, 25 to 100 H.P., 1200 to 3600 R.P.M. Write for stock list and prices. Expert repair service.
V. M. NUSSBAUM & CO., Fort Wayne, Indiana.

MOISTURE TESTER BARGAIN**FOR SALE**

Official Brown-Duvel Moisture Tester Complete with Electric Shut-Off Device and oil measuring device, less thermometers.
The Farmers' Merc. & Elevator Co.
Lindsey, Ohio.

MOTORS WANTED

SINGLE PHASE motor wanted; 10 or 15 hp, 60 cycle. State price and condition in first letter. Gregg Bros., RFD 3, Urbana, Ohio.

RAT EXTERMINATOR

RAT LUNCHES—Kills rats and mice without poison. Ready to use. Just lay them out. Endorsed by agricultural authorities. \$1 large package—\$3.50 a carton prepaid. Salesmen-Distributors wanted. Rat Lunches Co., Carroll, Ia.

ENGINES FOR SALE**DIESEL FOR SALE**

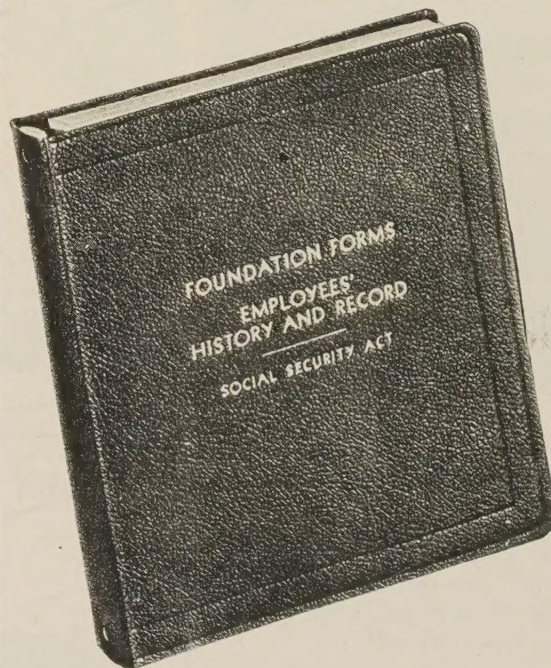
Number of F-M 25 h.p. new.
2 160 h.p. Atlas Imperial, new.
Other makes and sizes, new and used, prices to sell; terms when needed.
American Power Equipment Co.
Woolworth Bldg., Oil City, Pa.

SEEDS FOR SALE

SEED OATS that grow and win favor with those who plant them. Rice Grain Co., Metamora, Ohio.

FOLGUM SEED OATS, 7,500 bu. choice 36 to 38 lb. test weight, all from certified seed. Wy-more & Son, Liberty, Mo.

Every penny invested in a Journal "Wanted—For Sale" ad returns an amazing per cent of profit.



You Must Do It

Effective Jan. 1, 1937, in conformity with the Federal Social Security Act, it became obligatory on your part to keep a complete record, make out returns and pay taxes on your payroll if you employ one or more persons. You also must act as government collecting agent, withholding the tax due from your employees.

This new procedure will not be a burden if you use the Foundation Payroll Record System—Employees' History and Record—which provides spaces for all essential information required by the law. These forms may be used as a complete employee record, with the assurance that all the record requirements of the Social Security Act and any state compensation act will be met. The forms are designed for use with the customary payroll forms.

This system, a combination of two forms, contains enough forms for one to 25 employees; 25 yellow sheets for employer's permanent record and 25 white sheets with the same ruling for the employee. On the back of the white sheet is a termination report, to be filled in and the sheet given the employee when he leaves employer. Special Minimizing Tax Bulletin, a part of this service to all buyers of the Pay Roll Record System, will be included. Heavy ledger paper; durable 3-ring binder, price \$4.00, plus postage. Order Form EREE-101.

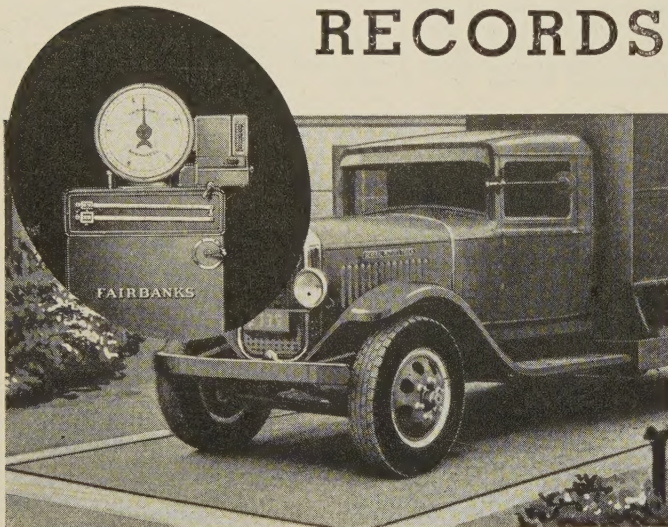
Grain & Feed Journals Consolidated

332 S. La Salle St.

Chicago, Illinois

START THE YEAR RIGHT

WITH

printed
WEIGHT
RECORDS

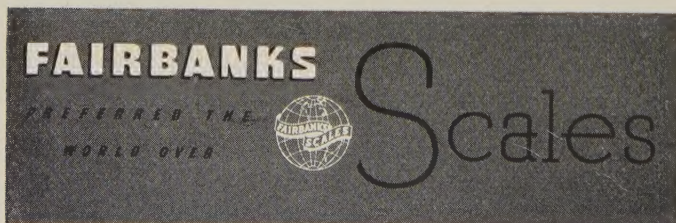
FAIRBANKS PRINTOMATIC WEIGHERS MAKE THEM AUTOMATICALLY

With grain prices where they are, it is more important than ever that your 1937 weight tickets be accurate—for misread scales, penciled and smudgy weight records, mean losses. And losses in this year of higher grain prices are losses indeed!

Fairbanks Type S Scales, amply strong to withstand sudden impacts, and designed to weigh motor trucks where 75% of the load may be concentrated on the rear axle, are especially built to meet the requirements of grain elevator service. Combine with them the famous Fairbanks Printomatic Weigher, which delivers a printed, accurate weight ticket with every operation, and you have a combination unequalled for fast, efficient, *accurate* accounting for every pound of materials that passes over the scale.

For your copy of Bulletin D391, address Fairbanks, Morse & Co., 900 S. Wabash Avenue, Chicago, Ill. And 40 principal cities—a service station at each house.

6898-SA22, 10



ALLIGATOR

TRADE MARK REG. U.S. PAT. OFFICE

STEEL BELT LACING

"JUST A HAMMER TO APPLY IT"

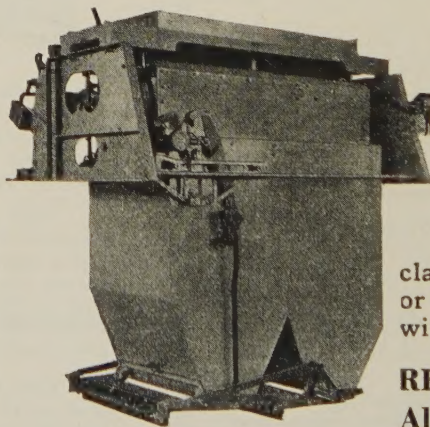
The smooth, durable hinged joint of Alligator Steel Belt Lacing is the most universally used of all belt lacings. Clinched teeth compress belt ends firmly, reducing destructive internal friction and ply separation. Twelve sizes in steel, "Monel Metal," and alloys for belts up to $\frac{5}{8}$ in. Standard boxes, "Handy Packages," and long lengths.

Sole Manufacturers
FLEXIBLE STEEL LACING CO.
4600 Lexington Street, Chicago
In England at 135 Finsbury Pavement, London, E.C.2

REG. U. S. PAT. OFFICE

GRAIN SHIPPERS!

**WATCH YOUR PRICES!
WATCH YOUR WEIGHTS!**



Both are equally important — Don't rely on obsolete, worn-out scales.

Have them put in first-class condition, or replace them with the modern

RICHARDSON
All - Automatic

Grain Shipping Scale

ACCURATE and SPEEDY

Richardson Scale Company

Factory: Clifton, N. J.

37 W. Van Buren St., Chicago, Illinois

Minneapolis, Minn.

Wichita, Kansas

GRAIN & FEED JOURNALS

CONSOLIDATED
INCORPORATED

332 S. La Salle St., Chicago, Ill., U.S.A.

Charles S. Clark, Manager

A merger of
GRAIN DEALERS JOURNAL
Established 1898

AMERICAN ELEVATOR & GRAIN TRADE
Established 1882

THE GRAIN WORLD
Established 1928

PRICE CURRENT - GRAIN REPORTER
Established 1844

Published on the second and fourth Wednesdays of each month in the interests of better business methods for progressive wholesale dealers in grain, feed and field seeds. It is the champion of improved mechanical equipment for facilitating and expediting the handling, grinding and improvement of grain, feeds and seeds.

SUBSCRIPTION RATES to United States, Canada and countries within the 8th Postal Zone, semi-monthly, one year, cash with order, \$2.00; single copy current issue, 25c.

To Foreign Countries, prepaid, one year, \$3.00.

THE ADVERTISING value of the Grain & Feed Journals Consolidated as a medium for reaching progressive grain, feed and field seed dealers and elevator operators is unquestioned.

Advertisements of meritorious grain elevator and feed grinding machinery and of responsible firms who seek to serve grain, feed and field seed dealers are solicited. We will not knowingly permit our pages to be used by irresponsible firms for advertising a fake or a swindle.

LETTERS on subjects of interest to those engaged in the grain, feed and field seed trades, news items, reports on crops, grain movements, new grain firms, new grain elevators, contemplated improvements, grain receipts, shipments, and cars leaking grain in transit, are always welcome. Let us hear from you.

QUERIES for grain trade information not found in the Journal are invited. The service is free.

CHICAGO, ILL., JANUARY 13, 1937

BARLEY in the Winnipeg market has staged a remarkable advance in prices during the past ten days. Dealers who have any in store may profit by sweeping their bins and cleaning the contents.

THOSE contemplating improving their elevators or constructing storage plants for grain may profit by a studied effort to get the jump on expected advancing costs and certain shortage of skilled labor. Before the decision is made to buy or build much preliminary work can be done to speed the beginning of actual construction.

THE DIFFERENCE between the market quotations on the new and old style corn shows that the differentiation effected by the change in the rules for grading is of real market significance. The premium on new style expresses the preference of processors for corn not containing so many flinty kernels that adequate soaking in the steeps leaves the dent corn mushy.

THE INCREASING number of small losses caused by fires in grain elevators proves the effectiveness of the fire fighting apparatus installed. It is not difficult to extinguish fires in their incipency if alert employees have efficient extinguishing equipment at every convenient point.

REDUCTION of the corn acreage as contemplated in 1937 by the Washington bureaucracy in the guise of soil conservation may prove to be another blunder, as the production may be too low with the wet and cold season of 1937 predicted by the long range weather forecasters.

PRIVATE initiative in the United States has been so successful without government interference in producing divisible wealth for the more abundant life that with only 7 per cent of the world's population and only 6 per cent of the acreage we harvest more than one-half of the world's foodstuffs.

WHATEVER may be the merits of the proposal Senator Ashurst, chairman of the Senate Judiciary Com'ite, has taken the right course in offering an amendment to the Constitution reading "Congress shall have the power to regulate agriculture, commerce, industry and labor." If the daily activities of the citizen in every vocation are to be regulated by government, and that by the federal government, by all means let the states decide whether control should be so centralized in the bureaucrats, instead of vainly striving to gain the same end by stealth and indirection.

IF some poor tenant farmers and impecunious share croppers were given a farm free of charge they would mortgage it for gasoline to run the flivver; and, lacking the virtues of self denial and hard work, soon would lose the farm and need a fresh start at the taxpayers' expense. Instead of attacking poverty from the farm angle, social workers would achieve more by measures to counteract the heredity and environment that has deprived so many of our unfortunates of the physical vigor, moral fiber and mental strength that earns the more abundant life.

MUCH FIELD CORN will be selected from farm cribs this year and sold for seed in the drouth stricken areas of the middle west. Reduced supplies of desirable seed corn will be reflected by higher prices and stimulate offerings of corn that is not acclimated, or that is of low germination, as seed corn, available at reduced prices. It behooves every grain dealer who is interested in promoting the welfare of his community, and in seeing big crops produced by his patrons, to exercise extreme caution in selecting the seed corn he offers to his trade, and to warn the farmers against the purchase of untested seed of unknown origin.

GRAIN dealers will hesitate to make advances to farmers in North Dakota after the proclamation by the Governor of that state Jan. 5 of a moratorium prohibiting foreclosure sales of personal property or residences. Politicians are the farmers' worst enemy.

CURIOSLY enough a big crop of wheat in 1937 east of the Rocky Mountains will effectively dispose of the alleged Pacific Northwest wheat export problem. Prices in the central states and Southeast for wheat will sink to a level so low as not to be enviously eyed by the Oregon growers, who then without subsidy will receive as much as growers in the East.

SUGGESTIONS for re-naming the grade of cereal oats more descriptively are not coming forward, the attitude being that since the trade has been educated to understand what is meant by cereal oats under the federal rules for grading it is immaterial by what name they are known. Unless the new name were really descriptive the federal supervision would have the education to do all over again. Cereal oats, tho small are sometimes of excellent quality. One suggestion that seems to have merit is to call them "midget" oats, conveying the thought that the oats are the same, tho small.

IN SPITE of short crops of oats and corn, and in spite of another widespread drouth that devastated wide areas in the agricultural middle west, grain and feed dealers as a class moved steadily forward in 1936. At no time since the boom years preceding 1930 have grain dealers installed so many new scales, new feed grinders and mixers, new seed cleaners, truck lifts, bearings, belts, buckets, boots, and other grain, feed and seed machinery as they have in the last 12 months. Elevator repairs, new offices, feed rooms, extensions and additions have kept contractors busy. Business is on the upswing among the grain elevators and 1937 may be expected to prove a year of real prosperity.

LEAKING CARS must be costing shippers a lot of money at present high prices of grain. A reduction in the number of cars reported leaking on arrival at Chicago unquestionably could have been accomplished last year by more careful cooeping. Of the 2,711 cars reported leaking in 1936 726 had grain door leaks and 661 were leaking over the grain door, indicating that the door needs attention by the shipper. Leaks elsewhere must be charged to failure of the railroad men to make the car fit for grain loading as certified. In a few cases the shipper can detect faulty work before loading and remedy the neglect. If not he must rely on proved loading weights to recover loss in transit.

WHEN the executive com'ite of the National Grange told the president Jan. 9 that they desired the giving of benefits to the family-sized farmer, the new practice of subsidizing farmers was started on the road to permanent policy. Grain dealers who do most of their business with the farmers will be pleased to see their customers more prosperous by receipt of federal bonuses, leaving statesmen, tax eaters and budget-balancers the task of selecting the back to bear the burden.

THE farmer who patronizes a trucker is helping to put the grain elevator out of business; and when the local grain elevator has quit where will the farmer obtain the many services now afforded by the elevator operator? When farmers act to discourage a local merchant they have no one to rely upon in an emergency, just as farmers who quit buying binder twine from the hardware merchant or elevator operator find themselves without any source of immediate supply of twine in case of a shortage.

STATE regulation of warehousemen in the states having future trading markets under the federal Commodity Exchange Act is so complete that there remains nothing for the administrators of the federal law to do but to copy the state regulations. During 80 years of experience in public warehousing in connection with a futures market the Chicago Board of Trade has worked out regulations providing buyers of the futures with complete security surrounding the storage certificates tenderable. The many interior grain warehousemen who have taken advantage of the liberal terms of the United States Warehouse Act could be expected to withdraw their voluntary acceptance if the regulations were made so strict as those enforced by the states and exchanges.

How Do You Do?

Life is made sweet because of friends we have made,
And the things which in common we share.
We want to live on, not because of ourselves,
But because of the people who care.
It's in giving and doing for somebody else;
On that all life's splendor depends,
And the joys of this life, when you've summed it all up,
Are found in the making of friends.

—Grace Walter Clarke

The Grain Trade Must Organize

If the grain trade is ever to gain merited recognition from law makers, investigating committees, government boards, bureaus and commissions, steps must be taken to bring about closer coordination of all grain trade organizations so as to present an united front and receive the consideration properly due the large interests involved. Today comparatively few citizens recognize in the grain trade an industry which performs a real service to producers and consumers of grain, yet all experienced dealers know that grain is marketed more efficiently and on a narrower margin than any other commodity.

While affiliation of some of the local associations with the National is an encouraging move toward consolidation of the organizations striving to promote and protect the interests of those engaged in the grain trade, it is just a beginning. To start with the state and local associations are not receiving the support needed and merited.

The grain trade of the Pacific Coast has been strangled by the labor Unions for so long a period it will experience much difficulty in getting back into service, yet it has been given no consideration by the contending factions. The first and often the only consideration given delegates by governmental agencies conducting hearings is, "Who do you represent? How many votes do they cast?"

The leaders in many industries, recognizing the increasing activities of association agencies in competing lines, are taking a deeper interest in the complete organization of their own trade. The merchant who, single-handed, tries to fight the battles of his own business, will receive scant consideration and attain little if any benefits. It is easy to understand why the completely organized trade will present a more convincing argument in support of its interests and why its complaint and petitions will be granted a more respectful hearing. Two heads are always better than one and a thousand will always receive more attention and wield a greater influence than a hundred. Members of the grain trade should readily recognize the great advantage of pulling together for the advancement of their common interests. Altho the percentage of the grain dealers represented in the association membership rolls has been small the benefit attained through the zealous labors of association leaders has been most gratifying. The creditable results attained thru the grain trade's partial organization should stampede the non-supporters to apply for membership in hope of greater benefits. They must realize that their business will be helped far beyond the cost of any association work, and the

more active their support of the associations the greater will be the benefits.

The wonderful gains in membership made by some of the associations should inspire other workers to copy their methods in building up an organization which will command the respect and attention not only for the greater association but for the entire grain trade. Without more complete organization the grain trade will remain at the mercy of the agitator and the promoter and suffer from malicious misrepresentation as in the past. Other interests are being completely organized in many lines, the grain trade must follow suit or have its rights ignored, its interests trampled in the dust.

Labor Troubles Impending

Altho grain shippers are fortunate in being able to deal directly with their employees, who are few in most grain handling plants, without the interference of agitators, they must reckon with the current unrest that may tie up their business in directions now unexpected.

To appreciate the menace to business activity threatened by the present epidemic of strikes we must consider the background, the largest factor being the battle between two factions for control of the labor movement and the \$1,000,000,000 annual dues contributed by members at \$25 each. Altho well financed and occupying the most luxurious quarters in Washington the head of the miners' union has not been conspicuously successful in improving the condition of the miners and is reaching out to control other crafts thru uniting all trades in each plant in a single organization.

With an eye on the main question, the collection of dues, the C. I. O. is insisting that the owners of plants pay dues for all employees, whether members or not, thru what is known as the "check-off." This involves the closed shop and is said to be the crux in the glass workers' strike. The reluctance of employers to concede what may lead to interference in management is leading to an impasse.

The workers are being misled by the agitators into believing they are not getting their fair share of the profits of industry. In a few small plants this is true; but the big industries have raised wages, and it is in these large key industries that the agitators are making the most trouble. They tell the workers about the big salaries of the bosses, when in fact if all the salaries of all the executives were diverted each worker would receive little more per week.

In 1929 the manufacturing industries paid out in wages 60 per cent, salaries 18.5 per cent and for dividends, interest and surplus 21.5 per cent, of their total expenses. In the years 1923 to 1929 80 per cent of the total income of industries went to wages.

Speculative Soybeans

What is happening to soybeans, that lusty new infant of the Chicago futures market? Since futures trading in soybeans started prices for both spot and futures have marched rapidly upward, advancing 40c a bu., or 33% in three months.

For producers this sharp advance in soybean prices is stimulating encouragement—at the moment. Farmers, visualizing a new prosperity, are planning the greatest acreage of soybeans this country will have known. On the basis of present prices they can hardly be blamed. Allowing 15c a bu. from current spot bean prices for freight and handling leaves \$1.45 a bu. to the farmer. This price, with production at 30 bus. per acre, which is reasonably close to the average, would give the farmer \$43.50 per acre. What grain crop will do so well?

Are present soybean prices justified and may soybean prices be expected to continue at the present level? In this connection consider first that one ton of soybeans will produce 250 lbs. of oil, 1,600 lbs. of meal, and 150 lbs. of shrink when processed in the average expeller plant. The cost of processing in addition runs from 17c to 20c a bu., depending upon the size, investment and location of the plant, plus operating efficiency and careful management. A standard, six-exPELLER plant, handling 300,000 bus. of beans annually is understood to have operating costs close to 20c a bu.

For a processing plant soybeans produce only two products—oil and meal. The f. o. b. sale price of the oil, plus the f. o. b. sale price of the meal, less shrink and operating costs, and a reasonable profit, determines the value of the beans delivered at the plant.

Spot soybean meal was quoted at Chicago early in January at \$43 per ton. This price gave the 1,600 lbs. of meal produced from a ton of beans a value of \$34.40. At about the same time soybean oil had a value of 10c per lb., which gave the 250 lbs. of oil from a ton of beans a value of \$25. Thus the combined value of the meal and the oil from a ton of soybeans was only \$59.40.

Spot raw soybeans on the Chicago market stood at \$1.60 a bu., or \$53.33 a ton early in January. Adding to this the cost of processing, 20c a bu., or \$6.60 a ton, gave a total cost of \$59.93 for processed oil and meal worth \$59.40. Where is the profit for the processor?

Consider second that in spite of all the talk about soybean flour, plastics, automobile parts, glue, and other industrial and dietary uses for soybean meal, 90% of the soybean meal produced must go into livestock feeds, and be consumed by farm stock, and 80% of the soybean meal produced finds outlet in branded commercial mixed feeds, prepared by large manufacturers.

As a feed soybean meal is a high protein vegetable concentrate, directly competitive with cottonseed meal, linseed meal, peanut meal and various other high protein vegetable concentrates. Spot cottonseed meal at Chicago early in January was quoted at \$40 a ton, a differential of \$3 a ton in favor of cottonseed meal.

When the feed manufacturer buys a high protein vegetable concentrate he is actually concerned with buying protein. To him a ton of 40% protein soybean meal means 800 lbs. of protein. Generally cottonseed meal will run slightly higher in protein than soybean meal. The feed manufacturer may be willing to pay a slight premium for the better balance of amino acids in the protein of soybean meal, but he is unwilling to pay a premium of \$3 a ton. Existing differentials have already caused a number of the large manufacturers of feed to shift their registrations of feed brands to eliminate soybean meal as one of the ingredients. Shifting feed brands costs money, and soybean meal will necessarily have to be sold at a considerable discount under cottonseed meal to bring these manufacturers back into the fold of soybean meal users.

Do current price levels and speculative holdings mean drastically lower prices for soybeans when another crop comes on the market? What are high prices for meal and beans doing to this still infant industry? These questions deserve the earnest consideration of soybean producers, shippers, handlers, market men, processors and economists.

Changing Grain Trade Trends

Peavey, the world's greatest grain merchant, once said in the horse and buggy days of 1901 that the proper place to store grain was at the country station before any expense had been incurred in its transportation.

Carrying this thought farther in these days of the highway truck it has been found to the sorrow of many country station operators that the farm has been substituted as the point of origin, the trucker-peddler going around the local elevator that must pay an exorbitant rate of freight on the carload for the short distance haul. The obvious remedy is to cut the charge for rail haul to cost, plus.

These local and short distance rates have remained high because the rail carriers had no competition elsewhere than at junction points. Now that the trucks are offering competition the railroads should make a rate that will get them the business, reverting to the old established principle of rate making by paraphrasing the rule to charge all the traffic will stand, to read "charge no more than the traffic will bear."

Crop Insurance

The crop insurance plan that seems to find favor with the President's com'ite and the Secretary of Agriculture contemplates the payment of premiums annually by the farmers in the form of a portion of their crop. After delivery of the specified percentage of the harvest to the government title to the grain or other product would pass; and the government as owner of the grain would be in position to contract for storage space.

Since the plan contemplates the return to the farmer of the accumulated grain in time of crop failure it follows that to avoid the expense of hauling grain back to the country station the crop would be stored as near as possible to the farmer who is to receive the grain.

The logical place for storage of the premium grain is the country grain elevator, just the place where the farmer can cash in on his returned crops.

If the storage is to be at the country station some changes must be made to adapt the country elevator to this service. Grain dealers have expected to make their profits on the purchase, shipment and sale of grain and not on storage. Storage whether free or for hire has been frowned upon as a bad practice since the elevator operator who has more grain offered for storage than he has room will ship out; and if he disposes of grain owned by farmers becomes liable for larceny as bailee.

Storage at the country station has so many advantages over storage on the farm or the terminal elevator that the government's arrangements for storage of its grain must include the country elevator. The country elevator storage contract should be sufficiently profitable to warrant construction of additional bins at country stations in the surplus territory. The construction should be substantial and added to year by year as the insurance premiums pile up. It is conceivable that grain might accumulate for five years before a crop failure transferred title to the grain in the elevator from the government back to farmers.

The additional storage necessary at country stations properly could be financed by the government as the real beneficiary of the investment. The terms of the loan to the elevator operator could provide that principal and interest be paid out of the storage charges on government wheat, so that if the government after a few years abandoned the scheme the country elevator operator would not have to pay for a white elephant.

The Washington authorities should have the hearty co-operation of the grain trade in working out this storage problem to the advantage of the farmer and the grain handler.

Asked—Answered

[Readers who fail to find trade information desired should send query for free publication here. The experience of your brother dealers is worth consulting. Replies to queries are solicited.]

Security Tax on Partner's Salary?

Grain & Feed Journals: With regard to application of the social security tax in its old age pension phase to a partnership does a partner drawing definite salary for full time work have to pay the tax? And does a partnership have to pay the employer's tax on his salary? We asked this question of the district social security board in Kansas City, but received no answer other than general printed material.—B. J. R.

Ans.: A man can not make an employee of himself by drawing fixed or variable amounts out of the profits or assets of a business he owns and operates. A partner is in the same position. It is not the payment of money to him that defines his status. He is an owner and perhaps an employer. The answer to both questions is no.

Employer's Liability Under Security Act

Grain & Feed Journals: Can employes from whom I have collected the 1 per cent tax on wages as required by the Social Security Act recover the taxes from me in the event the law is held to be unconstitutional? Would it be advisable to have employes sign an agreement to release me from claim for refund unless the government returns the deduction to me?—J. S. Martin.

Ans.: Under the Revenue Act of 1934, section 607, the Treasury Department has promulgated Regulation 91, as follows: "The employer is indemnified against the claims and demands of any person for the amount of any payment of such tax by the employer to the collector."

The theory is that the person collecting the tax is an agent of the government, which must protect its agents against such claims. A release signed by the employee is therefore unnecessary.

Shippers Help Themselves by Aiding Railroads

Grain & Feed Journals: We have received from the Association of American Railroads an appeal to aid them in repealing the long and short haul clause, arguing that repeal would enlarge their opportunities to reduce particular rates to meet competition in those cases where such reductions would secure enough additional business to increase the net revenue of the railroads. It would enable railroads to recover business now almost monopolized by other forms of transportation, at rates somewhat lower than the present rates but still high enough to cover the small added cost of additional service with some profit besides. It would not relax any of the safeguards of the Interstate Commerce Act. Railroads would be given more freedom to apply business methods to the recovery of traffic, the enlargement of their business, the improvement of their services, and the increase of their net revenue.

It would seem that all elevators who have been persecuted by the high freight rates now charged by the railroads should get back of this movement. At our local elevator we are charged 4c per bushel to move our corn a distance of 12 miles, making it very hard to compete against the trucking of grain to the larger markets.

We would appreciate an outline of procedure, if any in securing a reduction in our present freight rates.—Grangers Elevator Co., Richard Talbott, mgr., Manito, Ill.

Ans.: Increasing carriers' earnings in some directions will enable them to reduce rates in other situations. The long and short haul clause should be repealed, as no longer needed in these days of waterway and truck competition.

To get a rate adjustment, shipper should take it up with the officials of the railroad on which he is located. Manito is on the Chicago & Illinois Midland (owned by the Commonwealth-Edison Co.) with headquarters at Springfield, Ill., and the party to be addressed is G. Wehnert, general freight agent, Room 709, Illinois Building, Springfield.

Fluctuations of December Wheat, Corn and Oats

Whatever bearishness there was in the 1936 wheat campaign exhausted itself during the months of March and May, the December future never reacting 10 cents during its long climb from the first trade at 89½ cents Feb. 18 to \$1.43 Dec. 28, the last day of permissible future trading in that option.

The visible supply which usually increases during the last half of the year decreased from 78,445,000 bus. early in September to 62,459,000 bus. early in December, keeping cash wheat premiums at a high level and boosting the price of the future as maturity came nearer. For the first time in years Liverpool led in advancing prices.

December wheat made its low at 85 cents May 28 and was pulled up 30 cents per bushel by the stronger corn market to \$1.15 Aug. 3 and 4, the advance being resumed after the September 2 low of \$1.06½ as hedging pressure became lighter. Governmental actions strengthening the market were the knowledge that the Canadian Wheat Board was steadily reducing its burden by sales, and the removal of the Argentine government's price guaranty.

As the future was nearing its expiration it became apparent little cash wheat would be forthcoming to deliver, and the price moved up nearly 30 cents from \$1.13¼ Nov. 2, closing Dec. 28 at \$1.37½ to ¾.

Trading in December corn began May 14 at 54 cents and soon started a remarkable rise from 52¼ May 26 to 99¾ Aug. 3. This level was held for three months around 95 cents, the final upturn beginning Oct. 20 at 92½ to the high of the option Dec. 28 at \$1.11½, closing at \$1.09½ to ¾, for new style.

Chicago's facilities as a corn market are geared to handle a surplus no matter how great, and the condition this year where the Missouri River markets were paying more than Chicago for corn threatened corner prices for the yellow grain, until relieved by shipments from the east. This anomalous condition led to a closing price at Kansas City of \$1.17 for old style December corn, 8½ cents over Chicago.

Oats for the December delivery was first traded in at the season's low of 26½ cents May 27, advancing to 53½ Dec. 28 and closing at 52 to 51½ cents. The oats market participated in the general advance during June and July, but after the high of 46½ Aug. 19 exhibited a reluctance to advance, gaining less than 14 cents after the low of 39¾ on Oct. 20.

Altho bullish factors predominated in the grain markets the substantial advances achieved were probably chargeable to an adjustment to the devalued dollar. As bearing on this point Dun & Bradstreet reported Jan. 5 that the general level of wholesale commodity prices index stood at \$206.544, Jan. 1 against \$178.063 on Jan. 1, 1936, and that the average level is now the highest in 16 years. The grains naturally must participate in this general upward movement.

All significant price movements during the life of the options are shown on the chart appearing on the outside front cover.

Volume of 1936 Future Trading

L. A. Fitz, in charge of the Chicago office of the Commodity Exchange Administration, reports that during 1936 the total purchases of grain futures aggregated 7,342,826,000 bus. wheat in 1936, with figures for 1935 in parentheses (7,062,785,000) 1,995,674,000 bus. corn, (2,219,139,000) 896,907,000 bus. oats, (606,790,000) 205,218,000 bus. rye, (285,337,000) and 2,035,000 bus. barley, (1,313,000) on the Chicago Board of Trade. The total for all grains was 10,442,660,000 bus., against 10,175,099,000 in 1935.

Since 1921, when records began to be kept by the government the volume of trading on the Chicago Board has fluctuated as follows:

	Wheat	Corn	Oats	*Total
1934.....	7,500	3,193	1,005	12,084
1933.....	10,354	3,609	1,147	15,597
1932.....	8,080	1,497	254	10,006
1931.....	6,925	3,880	429	11,503
1930.....	12,449	4,352	780	18,147
1929.....	15,684	4,537	874	21,467
1928.....	8,939	6,322	821	16,479
1927.....	9,004	6,329	1,186	16,982
1926.....	13,322	3,811	1,004	18,578
1925.....	18,048	5,971	2,187	26,895
1924.....	9,597	5,759	1,767	17,827
1923.....	8,572	4,287	1,767	13,931
1922.....	11,073	4,287	788	17,493
1921.....	12,274	5,830	654	20,955

*Includes rye and barley.

A study of the figures shows that after three years of quiet there is a sudden burst of activity, indicating that 1937 should see a great expansion of trade in futures.

The May-July Wheat Spread

The present wide spread between Chicago May and July wheat, which at the present writing is about 17 cents in favor of the May, and which figure has been equaled or exceeded in only two instances in the last twenty years or more, is due to two things: the rapid decrease in the world's surplus of wheat during the last twelve months due to short crops in some of the largest producing and exporting countries last year, with the United States virtually on a domestic basis for the second season in succession, and the largest acreage ever planted to winter wheat in this country, for harvest in 1937.

A comparison with other years shows that during the first days of October and the last days of the following May, the eight-month periods in which the May and July futures are both quoted, the spread between the May and the July were as follows:

In 1934-35 the May ranged at a premium of 6¾ to 1½ cents over the July.

In 1933-34 the May ranged at a premium of 1¼ to 1¾ cents over the July the greater part of the time, with the July slightly higher than the May for a few weeks.

In 1932-33 the July ranged from even to a premium of 1¾ cents over the May. It was during this period that wheat prices were at the lowest level ever known in all countries of the world.

In 1931-32 during the first half of the eight-month period the May ranged from 1 to 6 cents over the July; during the second half, the July was at a premium of 1 to 5¼ cents over the May.

In 1930-31 during the last six months of the eight-month period the May was at a premium of from 6½ to 22¾ cents over the July. This was in the year when the Farm Board was supporting the May.

In other years, back to 1927, the May was generally at a small premium over the July, except in 1924-25, when May wheat sold as high as \$2.05¾ and was at a premium of from 14¾ to 32¼ cents over the July.—Hulburt, Warren & Chandler.

Minneapolis, Minn.—Dr. Alonzo E. Taylor, director of the Food Research Institute at Stanford University, has been appointed chairman of the research committee of General Mills, Inc., says James F. Bell, chairman of the milling company's board.

Letters from the Trade

[The grain dealers' forum for the discussion of grain trade problems, practices and needed reforms or improvements. When you have anything to say of interest to members of the grain trade, send it to the Journals for publication.]

Farmer Is a Capitalist

Grain & Feed Journals: The farmer is a capitalist. So is the grain dealer, whether he be independent, old-line, co-operative or what not. We believe the best interests of both are served for the present by continued recognition of the principles of individual enterprise, modified perhaps in the direction of humanitarianism as against overly-rugged individualism.

As in the past, there will be offered in the coming legislatures numerous measures, sincerely enough conceived in many cases, which nevertheless incontrovertibly contradict this belief.—Ron Kennedy, Pacific Northwest Grain Dealers Ass'n, Spokane, Wash.

Indiana's Convention Program

The tentative program of the thirty-sixth Annual Convention of the Indiana Grain Dealers Ass'n will be held in Indianapolis, Ind., Jan. 19-20.

Tuesday Morning Session

8:45 A. M. Registration on Sixth Floor, Indianapolis Board of Trade. Checking facilities in Room 604. Purchase Banquet tickets at time of Registration.

10:00 A. M. Community Singing.
Call to order and remarks by President G. A. Pritchard.

Address of Welcome—Wm. L. O'Connor, President Indianapolis Board of Trade.

Response on behalf of the Association—G. B. McBane, Maxwell.

"State Unemployment Compensation"—C. A. Jackson, Director, Unemployment Compensation Division, Indianapolis.

Address of the President, G. A. Pritchard, Fortville.

Report of the Secretary, Fred K. Sale, Indianapolis.

Report of the Transportation Committee—H. L. Gray, Chr'n, Crawfordsville.

Tuesday Afternoon Session

1:15 P. M. Community Singing.
Report of the Treasurer, R. B. McConnel, Indianapolis.

"The Robinson-Patman Bill"—Paul Fishback, Secy., National Food Brokers Ass'n, Indianapolis. Discussion of this Bill.

Presentation of the World's Corn King and remarks by Wm. H. Curry, Tipton.

"The Value of Using Minerals in all Manufactured Feeds and their Relation to Animal Nutrition." E. E. Clore, Greenwood. Discussion of this subject.

"Free Men in a Boat"—R. B. Bowden, Exec. Vice-Pres., Grain & Feed Dealers Nat'l Ass'n, St. Louis, Mo.

Showing of a sound motion picture entitled, "Dangerous Dusts" (15 min.) (This picture produced by the U. S. Dept. of Agriculture and shows dust explosions in Grain Elevators, etc. It is furnished by the courtesy of the Grain Dealers Nat'l Fire Insurance Co.)

Appointment of Convention Committees.

Wednesday Morning Session

9:30 A. M. Community Singing.
"How to Lose 12 Months Grain Profits in 3 Months"—Max Sellars, Forest.

Report of the Resolutions Committee.
"Plans of Southwestern Grain Dealers in Regulating the Itinerant Trucker."

Discussion of this subject.

"Federal Old Age Benefits" Albert A. Kuhle, Director, Bureau of Old Age Benefits, Indianapolis.

Discussion to follow.

Explanation of how to keep your Social Security records.

Report of the Nominating Committee.

New business.—Adjournment.

Entertainment for All

January 19th, 1:30 P. M. The ladies attending the Convention will be the guests of the Association at the premiere performance in Indianapolis of Shakespeare's immortal "Romeo and Juliet," the latest M-G-M film release.

6:30 P. M. The annual BANQUET in the Ball Room of the Columbia Club. An unusual and enjoyable musical program by the nationally known Herbert Petrie and his White Husars. Dancing until midnight.

Robinson-Patman Act Defended

Congressman Wright Patman of Texas while in Chicago Jan. 7 at an association banquet said that from 90 to 95 per cent of all manufacturing, jobbing and wholesale business' is affected by the Robinson-Patman law and predicted that it will be "rigidly enforced."

"The Clayton act of 1914 has stood the test of the courts for more than twenty-two years and the Robinson-Patman law is merely an amendment to the Clayton act. Therefore, there is no doubt in my mind as to the constitutionality of this law. The best lawyers in the country who have studied the question of the constitutionality of this measure are of the same opinion."

The law, he said, observes "one of the first duties of government, to protect the weak against the strong."

Cars Leaking Grain on Arrival at Chicago

J. A. Schmitz, weighmaster of the Chicago Board of Trade, reports that during 1936 2,711 cars, or 3.81 per cent of the total number of cars of grain arriving at that market were leaking.

The leaks were recorded as follows: At grain door, 726 or 1.02%; over grain door, 661 or .93%; at side of car, 754 or 1.06%; at end of car, 185 or .26%; at draw bar, 47 or .07%, and from car box, 338 or .47%.

These figures cover only cars containing grain and cars from points outside of the Chicago District, no cross-town cars.

Coming Conventions

Trade conventions are always worth while, as they afford live, progressive grain dealers a chance to meet other merchants from the same industry. You can not afford to pass up these opportunities to cultivate friendly relations and profit by the experience and study of others.

Jan. 19, 20. Indiana Grain Dealers Ass'n library of the Indianapolis Board of Trade.

Jan. 25. Farm Seed Group of the American Seed Trade Ass'n, Palmer House, Chicago, Ill.

Jan. 26, 27, 28. Farmers Grain Dealers Ass'n of Iowa, Des Moines, Ia.

Jan. 28, 29. American Corn Millers Federation, Jefferson Hotel, St. Louis, Mo.

Feb. 2, 3, 4. Farmers Grain Dealers Ass'n of North Dakota, Grand Forks, N. D.

Feb. 16, 17, 18. Farmers Elevator Ass'n of Minnesota, Minneapolis, Minn.

Feb. 22. Pacific Northwest Feed Ass'n, Seattle, Wash.

Feb. 22, 23. Farmers Grain Dealers Ass'n of Ohio, Toledo, O.

Feb. 23, 24, 25. Farmers Grain Dealers Ass'n of Illinois, Pere Marquette Hotel, Peoria, Ill.

Feb. 26, 27. Eastern Federation of Feed Merchants, Syracuse, N. Y.

May 10, 11. Illinois Grain Dealers Ass'n, Decatur Ill.

June 1, 2. Pacific States Seedsmen's Ass'n, Santa Barbara, Cal.

June 10, 11. American Feed Manufacturers Ass'n, Homestead Hotel, Hot Springs, Va.

June 21, 22. Ohio Grain, Mill & Feed Dealers Ass'n, Breakers Hotel, Cedar Point, O.

October 11, 12. Grain & Feed Dealers National Ass'n, Dallas, Tex.

Why Truck Dumps Are Cantankerous

Truck hoists become as cantankerous as a balky mule during cold weather. The regular grade of grease becomes too stiff for operation; a lighter grade makes it difficult to hold the raised load in position. Manufacturers suggest that the hoist be operated empty several times just prior to using. This will soften the grease and permit efficient operation. Blocking the lift up out of position the last thing at night will lighten the first operation in the morning.—Our Paper.

The Government's next general crop report will be issued March 19.

K. S. Templeton New Pres. of Chicago Board

Kenneth S. Templeton, a third-generation member of the Chicago Board of Trade, on Jan. 4 was elected the sixty-first president of the exchange.

Mr. Templeton will succeed Robert P. Boylan, retiring president, at the annual meeting of the Ass'n Jan 11.

President-elect Templeton is 47 years old, carrying on the Board of Trade practice in recent administrations to elect comparatively youthful men to the exchange presidency.

He became a member of the Board of Trade in 1911, following his graduation from the agricultural department of the University of Wisconsin. With his brother, Wallace, also a member of the exchange, he conducts the cash grain business of J. S. Templeton's Sons.

The firm was organized in 1912 and has operated continuously except for a two-year period during the World War when both junior Templetons were in service, Kenneth quitting the navy as a lieutenant after 20 months' service. He received his war training at Great Lakes and negotiated the Atlantic a half-dozen times with troop transports, his first wartime crossing being on the U. S. S. Calamaries. His grandfather, William Templeton, one of the earliest futures traders joined the Board of Trade in 1864.



K. S. Templeton, Pres.-Elect Chicago Board of Trade

Crop Reports

Reports on the acreage, condition and yield of grain and field seeds are always welcome.

Lahoma, Okla., Dec. 21.—Winter wheat is looking healthy; short stand, good in this territory.—Farmers Elevator Co.

Haviland, Kan., Dec. 28.—This is a wheat territory and prospects are now better than for the two preceding years.—Dunbar Grain Co., W. L. Dunbar.

Boonville, Ind., Jan. 9.—The open winter has caused growing wheat to advance rapidly and the crop looks most promising at this time.—W. B. C.

College Park, Md., Dec. 29.—The acreage of Maryland winter wheat seeded this fall is estimated by the Maryland Crop Reporting Service at 493,000 acres. This is an increase of 7% over the 461,000 acres seeded in the fall of 1935 and 4% over the 5-year average (1927-31) of 475,000 acres.

Tecumseh, Neb., Dec. 25.—Wheat in this section is in fair to good shape. Light snow settled around roots helped surface moisture. Subsoil moisture very little. West from Beatrice still very dry; wheat going into winter in very poor condition.—R. E. Harrington, with Geiger Grain Co.

Washington, Ind.—Among the heavy growers of popcorn in the county are William A. Lucas and son, of Elnora township, who produced about 15,000 bus. for market from eleven acres. The Lucases planted a new type of popcorn this year, the sunburst variety, with successful results.—W. B. C.

Louisville, Ky.—In line with the trend thruout the country, Kentucky farmers planted winter wheat in increased acreage this year. H. F. Bryant, Depart. of Agriculture statistician, reports. The state crop is estimated at 608,000 acres, a jump of 140,000 acres over last year, and an increase of 315,000 acres over the 293,000-acre average of the last five years.—A. W. W.

College Park, Md., Dec. 28.—Delaware winter wheat acreage seeded this fall is estimated at 91,000 acres, according to the Dec. 1 survey made by the Delaware Crop Reporting Service. The acreage seeded this fall is 2% larger than the 89,000 acres seeded last fall but 9% below the 5-year (1927-31) average of 100,000 acres. The Dec. 1 condition was reported at 85% of normal.—U. S. Dept. of Ag.

Washington, D. C., Jan. 5.—The chinch bug situation in the central part of the United States as 1937 begins is practically the same as at the beginning of 1933. Whether 1937 will bring an outbreak as serious as that of 1934 depends entirely on the weather between now and next summer. The abnormal cold last winter killed many hibernating bugs; spring and early summer rains drowned many that survived the cold; and the prolonged summer drouth dried up large numbers of the bugs. Fall weather, however, was so favorable that the pest made a successful late-season comeback in many places.—Dr. P. N. Annand, Bureau of Entomology and Plant Quarantine, U. S. Dept. of Ag.

Springfield, Ill., Jan. 7.—The production of soybeans in Illinois in 1936 is estimated at 17,216,000 bus. or 28% less than the record 1935 crop of 24,012,000 bus. The decrease was due to a reduction of 19% in acreage and a yield of 16 bus. per acre against 18 bus. in 1935. Favorable weather for full maturity of late planted beans was offset by more than usual loss from pods cracking open and shelling of beans in the field. Damage to pods from grasshoppers and from wet weather resulted in varying quality, especially in western and central Illinois. Combining and threshing was about 95% completed by mid-December. The enlarged consumption outlets for soybean products and generally higher prices offered to growers resulted in 60% of the 1936 total soybean acreage being harvested for beans, whereas the average for 1929-1934 was 43% cut for beans. The remaining acreage was utilized mostly for hay. Illinois produced slightly more than 58% of the soybean crop harvested in the United States in 1936.—Illinois Co-op. Crop Reporting Service.

Winchester, Ind., Jan. 2.—There has been a wonderful improvement in the appearance of wheat since our last report. We have had rain and warm weather until the ground has thawed out and nearly every farmer that comes in says wheat looks much better. Drizzled rain last night and is at it again this morning. There is still some wheat left in the country and farmers seem to have faith in higher prices. Corn gathering is all over, but they are still delivering corn and the consensus of opinion among farmers is they are selling their corn, feeding their oats, which have been worth very little for the past few years.—Goodrich Bros. Co., P. E. Goodrich, pres.

Dodge City, Kan., Jan. 1.—Moderate to heavy precipitation fell this week in eastern, north-central and northwest Kansas. It is dry in the southwest and for the most part the south-central sections, where no important moisture has fallen since early December. The top soil over that area is becoming quite dry. Fortunately, there has been little wind, or dust storms would again be common in the western area. Based on seeded acreage and present condition, it would seem reasonable to expect a crop of around 150,000,000 bus., with a minimum of 125,000,000 and a possible maximum of 200,000,000, should extremely favorable conditions prevail thruout the remaining months until harvest.—J. F. Moyer, sec'y Kansas Grain, Feed & Seed Dealers Ass'n.

Oklahoma City, Okla., Dec. 23.—The acreage of winter wheat sown in the fall of 1936 in Oklahoma is estimated to have been 5,426,000 acres, 112% of the fall acreage of 1935. The present acreage is the largest of record for Oklahoma. The condition of the crop on Dec. 1 was 68% of normal, compared with 71% on Dec. 1, 1935. Lack of sufficient moisture in the northwestern, west-central and southwestern counties has resulted in unfavorable growth in those areas; some damage due to wind erosion occurred in November. Timely rains are needed to prevent the occurrence of heavy abandonment similar to that experienced during the last four years. The acreage sown to rye in Oklahoma in the fall of 1936 is estimated to have been 80,000 acres, compared with 68,000 acres in the fall of 1935.—U. S. Dept. of Ag.

Topeka, Kan., Dec. 21.—The condition of winter wheat on Dec. 1 at 80% compares with 81% last December and 77% the ten-year December average. Winter wheat seedings have been substantially increased in all parts of the state, except in extreme west-central and south-western counties, where a shortage of soil moisture at seeding time prevented growers from seeding all of their intended acreage. The condition of winter wheat in the eastern two-thirds of the state is such that the present outlook is for fair to good yields over this area in 1937.—U. S. Dept. of Ag. and Kansas State Board of Ag.

Winnipeg, Man.—For the third successive survey of the protein content of barley 1945 samples were collected and analyzed; of these 948 originated from 265 shipping points in Manitoba, 661 from 231 points in Saskatchewan and 336 from 135 stations in Alberta. All grades with the exception of grade No. 6 CW are approximately 0.5% higher in protein content and the general mean is 0.3% higher than the corresponding protein figures for last year; however, a comparison with last year's report shows that while the barley in Manitoba and Saskatchewan is approximately 0.5% higher this year, the reverse is true in Alberta.—Grain Research Laboratory, Board of Grain Commissioners.

Helena, Mont., Dec. 23.—Winter wheat plantings this fall by Montana farmers are 20% smaller, and plantings of rye are 40% smaller than a year ago. The winter wheat plantings of 966,000 acres compare with 1,208,000 acres planted in the fall of 1935, while the fall rye plantings of 78,000 acres this year compare with 130,000 acres seeded last year. The decrease in fall seedings of winter wheat this year is really a return toward normal seedings following the unusually large seedings of a year ago. In case of rye plantings the 1936 decrease likewise represents a swing toward a more normal acreage. Dry weather from Sept. 1 until Dec. 1 has been unfavorable for germinating fall sown grain, as well as for normal growth of sprouted grain. Condition of both winter wheat and winter rye this year on Dec. 1 is reported at the same percentages as a year ago.—U. S. Dept. of Ag.

United States Grain Crops for 51 Years

Estimates of the U. S. Department of Agriculture of wheat, corn, oats, rye and barley crops of the United States from 1886 to 1936, in bushels, are as follows:

	Wheat		Corn,		Oats	Rye	Barley
	Winter	Spring	All	All			
1886			513,540,000	1,782,767,000	682,312,000	23,854,000	73,503,000
1887			490,761,000	1,604,519,000	696,175,000	22,548,000	72,395,000
1888			423,867,000	2,250,632,000	773,139,000	28,417,000	75,980,000
1889			504,370,000	2,294,289,000	831,047,000	29,524,000	80,790,000
1890			449,042,000	1,650,446,000	609,122,000	26,378,000	69,880,000
1891			677,543,000	2,335,804,000	836,789,000	29,541,000	94,160,000
1892			611,854,000	1,897,412,000	721,824,000	28,718,000	95,170,000
1893			505,795,000	1,900,401,000	707,129,000	26,700,000	87,109,000
1894			541,873,000	1,615,016,000	750,009,000	26,758,000	74,211,000
1895			542,119,000	2,534,762,000	924,858,000	29,636,000	104,475,000
1896			522,963,000	2,671,048,000	774,929,000	31,858,000	97,479,000
1897			606,202,000	2,287,628,000	829,525,000	31,137,000	102,575,000
1898			768,148,000	2,351,323,000	842,205,000	29,062,000	98,174,000
1899			655,143,000	2,645,796,000	937,173,000	26,001,000	118,161,000
1900			599,315,000	2,661,978,000	945,483,000	27,413,000	96,588,000
1901			762,546,000	1,715,752,000	799,812,000	30,773,000	123,800,000
1902			686,959,000	2,773,954,000	1,076,899,000	33,877,000	146,207,000
1903			663,115,000	2,515,093,000	885,469,000	28,932,000	149,335,000
1904			555,571,000	2,686,624,000	1,011,556,000	28,461,000	166,103,000
1905			706,026,000	2,354,148,000	1,104,395,000	31,173,000	171,639,000
1906			740,509,000	3,032,910,000	1,022,715,000	29,609,000	179,148,000
1907			628,784,000	2,613,797,000	801,144,000	28,247,000	150,584,000
1908			642,818,000	2,566,742,000	829,308,000	28,650,000	170,780,000
1909	417,796,000	266,131,000	683,927,000	2,611,157,000	1,013,909,000	30,083,000	173,069,000
1910	429,875,000	195,601,000	625,476,000	2,852,794,000	1,106,162,000	29,098,000	142,419,000
1911	428,740,000	189,426,000	618,166,000	2,474,635,000	885,527,000	31,398,000	145,074,000
1912	402,703,000	327,308,000	730,011,000	2,947,842,000	1,353,273,000	37,911,000	196,927,000
1913	501,239,000	249,862,000	751,101,000	2,272,540,000	1,039,131,000	40,390,000	158,820,000
1914	670,945,000	226,542,000	897,487,000	2,523,750,000	1,066,328,000	42,120,000	177,712,000
1915	640,565,000	368,072,000	1,008,637,000	2,829,044,000	1,435,270,000	46,751,000	206,976,000
1916	456,118,000	178,454,000	634,572,000	2,425,206,000	1,138,969,000	43,089,000	159,157,000
1917	389,956,000	229,834,000	619,790,000	2,908,242,000	1,442,519,000	60,321,000	182,209,000
1918	556,506,000	347,624,000	904,130,000	2,441,249,000	1,428,611,000	83,421,000	225,067,000
1919	748,460,000	203,637,000	952,097,000	2,678,541,000	1,106,603,000	73,659,000	131,086,000
1920	613,227,000	230,050,000	843,277,000	3,070,604,000	1,444,291,000	61,915,000	171,042,000
1921	602,793,000	216,171,000	818,964,000	2,928,442,000	1,045,270,000	61,023,000	132,702,000
1922	571,459,000	275,190,000	846,649,000	2,707,306,000	1,147,905,000	100,986,000	152,908,000
1923	555,299,000	204,183,000	759,482,000	2,875,292,000	1,227,184,000	55,961,000	158,994,000
1924	571,558,000	268,533,000	840,091,000	2,298,071,000	1,424,422,000	59,076,000	167,314,000
1925	401,116,000	268,026,000	669,142,000	2,853,083,000	1,410,336,000	42,779,000	192,779,000
1926	631,950,000	201,594,000	833,544,000	2,574,511,000	1,141,941,000	35,361,000	164,467,000
1927	547,666,000	327,067,000	874,733,000	2,677,671,000	1,093,997,000	52,111,000	240,057,000
1928	577,417,000	335,544,000	912,961,000	2,714,535,000	1,318,977,000	38,591,000	239,625,000
1929	586,055,000	236,125,000	822,180,000	2,535,546,000	1,118,414,000	35,482,000	280,242,000
1930	631,205,000	258,497,000	889,702,000	2,065,273,000	1,277,379,000	46,275,000	303,752,000
1931	817,962,000	114,259,000	932,221,000	2,588,509,000	1,266,913,000	32,290,000	198,543,000
1932	478,291,000	267,497,000	745,788,000	2,906,873,000	1,246,548,000	40,639,000	202,042,000
1933	350,792,000	178,183,000	528,975,000	2,351,658,000	731,500,000	21,150,000	155,825,000
1934	405,552,000	91,377,000	496,929,000	1,377,126,000	525,889,000	16,045,000	118,348,000
1935	465,319,000	161,025,000	626,344,000	2,296,669,000	1,194,902,000	58,597,000	285,774,000
1936	519,013,000	107,448,000	626,461,000	1,524,317,000	789,100,000	25,554,000	147,452,000

Grain Movement

Reports on the movement of grain from farm to country elevator and movement from interior points are always welcome.

New York, N. Y., Dec. 31.—New York today received 75,000 bus. of Argentine corn.

Omaha, Neb.—During 1936 the Omaha market received 45,451,347 bus. of all grains, and shipped 38,219,343 bus.

Minneapolis, Minn., Jan. 2.—The Minneapolis market received a total of 123,836,190 bus. of grain during 1936, compared with 131,975,030 bus. during 1935, and shipped 83,159,270 bus., compared with 77,210,360 bus.

St. Joseph, Mo.—During the 12 months ending Dec. 31 the St. Joseph market received 19,174,350 bus. of grain and shipped 11,260,100, compared with 1935 receipts of 15,155,250 bus. and shipments of 8,522,050 bus.

St. Joseph, Mo., Jan. 1.—Total receipts of all grains at the St. Joseph market during 1936 were 19,174,350 bus., compared with total receipts of 15,155,250 bus. during 1935. Shipments were 11,260,100 bus., compared with 8,522,050 bus. in 1935.

Fort Worth, Tex.—Inspected receipts of grain at the Fort Worth market during the calendar year 1936 were 11,452 carloads, shipments 3,954 carloads, compared with receipts of 10,224 carloads and shipments of 3,743 carloads during 1935.

Fort William, Ont.—Fifteen grain vessels are wintering here, following a navigation season in which 204,000,000 bus. of grains moved by lake from Fort William-Port Arthur. The vessels have their holds filled with grain in store for the winter.

Kansas City, Mo.—Shipments of grain from Kansas City in 1936, compared with 1935, were as follows: Wheat 32,352,000 bus., corn 9,193,000, oats 3,294,000, kafir 443,000, barley 377,000, rye 79,000, cane 33,000, compared with wheat 26,556,000 bus., corn 15,945,000, oats 1,692,000, kafir 472,000, barley 118,000, rye 322,000, cane 33,000, in 1935.

Portland, Ore., Dec. 28.—Included in the expected post-strike furor of maritime activity will be the despatch to Japan of four cargoes of northwest wheat totaling about 30,000 tons, provided vessels to handle the consignments can arrive at Puget Sound or Columbia River ports within five weeks following resumption of shipping.—F. K. H.

Decatur, Ill., Jan. 2.—The corn movement this season is still large in proportion to the crop. When farmers can realize \$1 a bus., offerings are liberal. When the price drops below this figure they simply will not sell. More of the corn is going into the visible supply than last year, which would indicate that the corn industries are buying only from hand-to-mouth, while other buyers are using substitutes where-

ever possible. This is the usual time of year when the corn millers withdraw from the market and take inventories. This year is no exception.—Baldwin Elevator Co.

Chicago, Ill.—Total receipts of grain at Chicago during 1936, including receipts by lake, Illinois waterways, rail and truck, were as follows: Wheat 23,482,000 bus., corn 60,503,000, oats 21,987,000, rye 7,255,000, barley 15,691,000, soybeans 8,847,000. Total shipments during 1936 were: Wheat 20,762,000 bus., corn 25,333,000, oats 17,915,000, rye 6,544,000, barley 3,310,000, soybeans 4,268,000.—Lyman C. West, statistician, Chicago Board of Trade.

Milwaukee, Wis.—Grain receipts during 1936 compared with 1935 were as follows. The 1936 figures being given first. Wheat, 3,684,144 bus. and 4,379,378 bus.; corn, 7,036,610 and 5,430,106; oats, 906,260 and 2,115,709; barley, 28,842,222 and 18,114,161; rye, 573,075 and 177,853; total, 41,042,311 bus. and 30,217,207 bus. Shipments during the same period were: Wheat, 4,660,021 bus. and 3,944,177 bus.; corn, 1,307,700 and 2,139,950; oats, 1,413,200 and 1,642,580; barley, 8,119,521 and 6,191,055; rye, 468,115 and 62,750; total, 15,968,557 bus. and 13,980,512 bus.—H. A. Plumb, sec'y Milwaukee Grain & Stock Exchange.

Ottawa, Ont., Jan. 7.—Canadian wheat in store for the week ending Jan. 1, 1937, decreased 2,187,914 bus. compared with the preceding week and 147,394,115 bus. when compared with the corresponding week in 1936. The amount in store including 3,924,933 bus. in rail transit was reported as 113,351,539 bus. compared with the revised figure of 115,539,453 bus. for the preceding week and 260,745,654 bus. for the week ending Jan. 3, 1936. Wheat marketings in the Prairie Provinces for the week ending Dec. 25 amounted to 1,319,700 bus. a decrease of 780,202 bus. from the previous week when 2,099,902 bus. were marketed. During the corresponding week a year ago, the receipts were 1,799,370 bus.—R. H. Coats, Dominion Statistician.

Duluth, Minn.—The crop failure of 1936 resulted in a small movement of grain to this market. Slow eastern milling demand and strong competition from outside northwestern

milling centers helped to divert grain from this market. High premiums were paid to secure needed supplies and the shortage in local domestic supplies compelled importation of foreign supplies in large volume. Even shipments of winter wheat from eastern states were received here for reshipment to mills in southern part of the state. Total grain stocks at the close of the year, Dec. 31, 1936, were reported at 15,629,507 bus., just a fair amount to go into the winter with and little chance of any material movement coming on during the next few months to build up accumulations.—F. G. C.

Houston, Tex., Dec. 22.—Import movement of corn thru Houston from the Argentine, which is expected to total nearly 1,000,000 bus. during the coming few months, was inaugurated the middle of this month with the arrival of a steamer from Rosario. The first consignment consisted of approximately 250,000 bus., and arrival of the vessel marked the first time in more than a year that any grain had been imported thru here from South America. A second consignment, consisting of approximately 250,000 bus., is slated to arrive here the latter part of this month, while there are several vessels tentatively slated to discharge grain cargoes here the early part of next year. The corn being handled thru Houston is a portion of the heavy purchases made in South America this year in order to supply the needs of this country, which was brot about by the short corn crop produced in the United States.—Houston Port Register.

Duluth Receipts and Shipments

During 1936 Duluth receipts included 11,891,929 bus. wheat, 2,477,788 bus. corn, 3,574,601 bus. oats, 6,466,671 bus. barley, 2,907,309 bus. rye, and 1,442,705 bus. flax. Shipments were 25,484,759 bus. wheat, 2,505,778 bus. corn, 7,317,824 bus. oats, 8,381,855 bus. barley, 3,463,282 bus. rye, and 1,402,161 bus. flax.

Receipts at Duluth of grain in bond during 1936 were 16,043,898 bus. wheat, 54,565 bus. oats, 99,924 bus. rye, 4,956,592 bus. barley, a total of 21,136,979 bus.

Receipts of grain by lake at Duluth-Superior during 1936 were 465,971 bus. of feed wheat, 6,367,804 bus. spring wheat, 9,162,046 bus. durum wheat, 813,056 bus. winter wheat, 54,565 bus. oats, 51,514 bus. corn, 5,473,085 bus. barley, 99,924 bus. rye, and 295,858 bus. flax.

Barley Movement in December

Receipts and shipments of barley at the various markets during December, compared with December, 1935, in bushels, were:

	Receipts		Shipments	
	1936	1935	1936	1935
Baltimore	2,432	11,586		
Chicago	959,000	1,014,000	297,000	252,000
Cincinnati	3,200	1,600		
Duluth	664,830	380,581	891,568	659,488
Ft. William	724,276	219,951	996,609	33,731
Ft. Worth		3,200		
Kansas City	59,200	51,200	16,000	27,200
Milwaukee	1,669,873	1,867,000	666,650	732,325
Minneapolis	1,851,450	1,678,270	1,471,880	1,606,620
Omaha	56,000	222,400	62,417	169,550
Peoria	405,800	294,800	186,200	112,000
Philadelphia	1,606	4,993		
St. Joseph	14,000	68,250	3,500	10,500
St. Louis	281,600	233,600	54,400	56,562
San Francisco	15,833	1,131,333		869,833
Seattle	22,400	6,400		
Superior	379,708	230,588	409,079	185,921
Toledo	2,400	6,000	40,005	1,725

Rye Movement in December

Receipts and shipments of rye at the various markets during December, compared with December, 1935, in bushels, were:

	Receipts		Shipments	
	1936	1935	1936	1935
Baltimore	127,397	184,518		
Chicago	388,000	140,000	551,000	1,019,000
Cincinnati	9,800	11,200		1,400
Duluth	104,269	503,265	48,464	42,851
Ft. William	135,107	59,351	5,060	
Indianapolis	98,000	285,000	89,000	82,500
Kansas City	16,500	12,000	1,500	3,000
Milwaukee	120,275	28,300	85,340	15,060
Minneapolis	540,160	511,560	374,770	494,700
New Orleans	4,555			
Omaha	15,400	29,400	41,748	29,400
Peoria	188,000	233,800	15,600	19,200
Philadelphia	6,093	7,196		
St. Joseph	7,500	6,000		1,500
St. Louis	16,500	4,500	42,000	10,500
Seattle	1,500	1,500		
Superior	85,581	135,346		
Toledo	4,800	14,400	2,600	3,010
Wichita			1,300	

Wheat Movement in December

Receipts and shipments of wheat at the various markets during December, compared with December, 1935, in bushels, were:

	Receipts		Shipments	
	1936	1935	1936	1935
Baltimore	8,466	698,470		79,930
Boston		1,003,241		
Chicago	898,000	1,122,000	886,000	794,000
Cincinnati	116,800	118,400	171,200	326,400
Duluth	736,853	558,033	3,645,170	2,872,908
Ft. William	1,518,258	4,085,829	4,501,871	2,874,635
Ft. Worth	462,000	140,000	240,800	84,000
Hutchinson	1,899,800	449,400		
Indianapolis	110,000	111,000	140,000	185,000
Kansas City	3,156,800	1,836,800	2,709,015	1,801,315
Milwaukee	12,320	126,021	19,600	324,005
Minneapolis	3,224,040	3,896,860	1,025,200	1,624,150
New Orleans	11,147	18,078	21,000	8,325
Omaha	563,200	646,400	676,823	330,400
Peoria	96,000	32,400	115,200	49,600
Philadelphia	5,416	526,455		40,000
St. Joseph	296,000	408,000	420,300	233,600
St. Louis	645,400	586,500	738,500	524,266
San Francisco	4,000	48,666		
Seattle	704,200	470,400		
Superior	359,336	476,648	1,412,464	635,431
Toledo	267,225	341,600	622,545	306,660
Wichita	1,572,000	444,000	1,176,000	444,000

Corn Movement in December

Receipts and shipments of corn at the various markets during December, compared with December, 1935, in bushels, were:

	Receipts		Shipments	
	1936	1935	1936	1935
Baltimore	447,270	101,389		
Boston	834,263	1,500		
Chicago	7,606,000	5,541,000	1,491,000	1,524,000
Cincinnati	700,500	489,000	339,000	277,500
Duluth	1,126	76,719	7,672	239,921
Ft. William			4,543	2,200
Ft. Worth	231,000	115,500	105,000	52,500
Hutchinson		6,000		
Indianapolis	1,820,000	2,533,000	1,069,000	1,529,000
Kansas City	1,143,000	2,232,000	409,500	1,071,000
Milwaukee	638,600	416,950	100,100	57,200
Minneapolis	644,630	1,055,440	252,040	934,610
New Orleans	139,051	16,419	114,000	19,563
Omaha	1,625,400	2,144,800	1,433,202	1,652,828
Peoria	1,225,400	1,100,900	415,200	521,000
Philadelphia	826,817	303,988		
St. Joseph	348,000	714,000	57,000	169,500
St. Louis	2,869,900	1,621,500	925,500	557,315
San Francisco		7,428		
Seattle	1,500	7,500		
Superior	2,207	55,418		110,752
Toledo	178,750	330,000	75,915	188,025
Wichita	29,900	37,700	7,800	13,000

Oats Movement in December

Receipts and shipments of oats at the various markets during December, compared with December, 1935, in bushels, were:

	Receipts		Shipments	
	1936	1935	1936	1935
Baltimore	76,390	57,267		
Boston	17,900	30,100		
Chicago	918,000	986,000	1,611,000	866,000
Cincinnati	136,000	82,000	48,000	48,000
Duluth	14,478	619,456	1,106,427	1,181,357
Ft. William	642,887	501,677	169,763	1,394,152
Ft. Worth	136,000	34,000	24,000	20,000
Indianapolis	316,000	156,000	434,000	200,000
Kansas City	130,000	126,000	326,000	170,000
Milwaukee	92,660	124,300	30,400	77,900
Minneapolis	215,420	1,172,000	2,693,780	2,914,560
New Orleans	7,967	15,078	2,300	14,517
Omaha	464,000	352,000	1,448,892	253,323
Peoria	150,000	180,900	192,800	168,000
Philadelphia	58,106	40,732		
St. Joseph	698,000	386,000	50,000	72,000
St. Louis	528,200	388,000	268,000	271,500
San Francisco	5,000	6,875		
Seattle	44,000	66,000		
Superior	56,459	411,579	366,092	7,500
Toledo	1,498,230	666,700	1,039,520	536,095
Wichita	4,500	3,000	1,500	3,000

Grain Stocks on Farms

Washington, Jan. 11.—The Dept. of Agriculture reports grain stocks on farms Jan. 1 in bushels; three ciphers omitted:

Crop—	Aver. 1928-32	*Pct. 1936	*Pct. 1937
†Corn	1,384,047	70.0	1,404,621
Wheat	249,318	26.1	163,360
Oats	686,164	64.5	770,398
			61.4
			484,356

*Per cent of previous year's crop. †Data based on corn for grain.

Winter Wheat Production Estimated

Production of winter wheat in 1937 is estimated at slightly more than 600,000,000 bus., reports the Bureau of Agricultural Economics. The acreage seeded to winter wheat last fall is estimated at 57,187,000 acres, the highest on record, an increase of 15% over last year, and of 26% over the 1927-31 average. Condition of the seeded crop on Dec. 1 was 75.8% of normal.

Assuming no change in the 24,500,000 acres that are normally seeded to spring wheat, the lowest yield on record (4.5 bus. per seeded acre in 1936) would produce 110,000,000 bus. of this crop, the highest yield on record (19.5 bus. per seeded acre in 1922) would produce 475,000,000 bus. of spring wheat in 1937.

Soybean Prices for Two Years

No. 2 yellow soybeans have made a high and low each month at Chicago as follows:

	1936	1935
January	\$0.85 @ .93	\$1.18 @ 1.22
February .....	.84 @ .85½	1.10½ @ 1.22
March .....	.79½ @ .85	.85 @ 1.22
April .....	.80 @ .85½	.98 @ 1.07
May .....	.84 @ .85	.98 @ 1.02
June .....	.84½ @ 1.00½	.80 @ .92
July	1.01 @ 1.33	.60 @ .80
August	1.34 @ 1.51	.60 @ .82
September	1.18½ @ 1.50	.57 @ .66
October	1.20 @ 1.27½	.72 @ .81½
November	1.23¼ @ 1.38	.70 @ .82
December	1.34½ @ 1.59	.65 @ .93
Range .....	.79½ @ 1.59	.57 @ 1.22

The Supreme Court of the United States has denied the Kansas City Board of Trade a review of the decision of the federal district court upholding the Commodity Exchange Act.

Grand Forks, N. D.—The State Mill & Elevator, operated by the state of North Dakota, reported an operating loss of \$96,819.15 in the official audit for the year ending June 30, 1936. Total loss, including bond interest and depreciation, was \$368,572.08 for the same fiscal year. Just like experiments of other governments in business.

Legislation at Washington

Officials of the A. A. A. have turned over to Representative Marvin H. Jones of Texas, chairman of the House Committee on Agriculture their legislative recommendations; and Mr. Jones conferred Jan. 4 with the President.

Bills to extend the Commodity Credit Corporation are among those the subject of conferences between congressional leaders and officials. The C. C. C. otherwise ends Apr. 1.

A bill will be introduced to extend the President's power to devalue the dollar. It expires Jan. 30.

The new farm program will include: A plan of government aid to tenants in acquiring farms. A government crop insurance plan limited at the outset to wheat. A revision of the soil conservation program without changing its purpose. One of the principal alternatives will be to repeal the part of the old law which, in 1938, would have transferred the administration of the program to the states, in order to permit federal control of the plan to be continued.

Senator Bankhead said he would propose appropriations of \$50,000,000 annually for ten years for a corporation to make loans to tenant farmers to buy their land. Landlords may not be willing to sell. The loans would be at 3½ per cent, to be amortized over periods up to sixty years. Few farmers till the soil forty years.

Senator Connally proposed to create a farm tenant home purchase corporation with a comprehensive system of land purchases and loans.

He would authorize \$1,000,000,000 capital stock for the corporation, to be provided by allotments and appropriations as required.

The Bankhead-Jones Act, approved June 29, 1935, appropriated \$1,000,000 for agricultural research in the fiscal year ending June 30, 1936, and provides for an annual increase of \$1,000,000 each year until the annual appropriation is \$5,000,000. These appropriations are to be divided on a basis of 40 per cent to the Federal department and 60 per cent to the states. The 60 per cent, or \$600,000, to the states was increased under the Hatch, Adams and Purnell Acts to \$4,995,000 for the last fiscal year. The stations had \$11,358,844 from state and other sources, a total of \$16,353,844.

The farm tenancy bill was introduced in the Senate Jan. 8 by Bankhead of Alabama, to create the Farmers Home Authority in the Dept. of Agriculture for long time loans at low interest to tenants for purchase of farms, out of an appropriation of \$50,000,000 a year

for 10 years. Altho this is the administration bill it will encounter opposition in the House from Buchanan of Texas who declares tenant farmers are just naturally shiftless and not deserving government assistance. Buchanan is chairman of the appropriations committee.

"Flint" to Be Noted on Corn Certificates

The standards now in effect do not classify flint corn nor mixtures of flint and dent corn with sufficient definiteness to meet the requirements of the industry. Corn of either the flint or dent variety is acceptable to many branches of the trade when the deliveries are kept true to type and sold for what they are; but mixtures of the two types present difficulties to feeders and processors.

By far the greater proportion of the corn produced in this country is of the dent type, but during the present marketing season a material quantity of flint corn has found its way into marketing channels. The standards were amended, therefore, to enable trade members to negotiate their contracts with confidence in the character of corn which they may expect on delivery.

On and after Jan. 20, 1937, mixtures of flint and dent corn will be labeled on inspection certificates as "flint and dent" if the mixtures contain more than 5 per cent but less than 95 per cent of flint corn.

Corn consisting of 95 per cent or more of corn of the flint varieties will be certificated as "flint" corn.

Conversely, dent corn which contains not more than 5 per cent of flint corn will function in the trade as dent corn. The designation "dent" will not appear on certificates because dent corn normally comprises the bulk of our corn in merchandising channels and the addition of the word "dent" would result in a long and cumbersome grade designation in telegrams, cables, bids and offers, contracts, and other documents.

Briefly then—dent corn is the rule and carries no added designation; flint corn and mixtures of flint and dent are the exceptions that will be specially designated on certificates on and after Jan. 20.

These amendments do not affect the specifications of the numerical grades and sample grade of the official corn standards.

Grain Dealers Ass'ns. and their paid employees come under the Social Security Act and must report and pay.

Daily Closing Prices

The daily closing prices for wheat, corn, oats, rye, barley and soybeans for May delivery at the following markets for the past 2 weeks have been as follows:

	Option		Wheat														
	High	Low	Dec. 23	Dec. 24	Dec. 26	Dec. 28	Dec. 29	Dec. 30	Dec. 31	Jan. 4	Jan. 5	Jan. 6	Jan. 7	Jan. 8	Jan. 9	Jan. 11	Jan. 12
Chicago	137 3/4	101 1/4	131 1/2	134 3/4	136 %	135 1/8	135 %	135 %	135 1/8	135 %	132 1/2	131 1/2	133 1/2	132 1/2	133 %	133 1/2	134 1/2
Winnipeg	130 3/4	95 1/2	123 1/2	128 %	....	128	127 1/2	128 %	129	129 1/2	126 3/4	126 3/4	126 3/4	128 3/4	127 1/2	128 %	128 1/2
Liverpool*	133 1/2	....	127 1/2	129 %	....	132	132 %	130 %	132 %	132 %	130 %	129 1/2	131 %	130 %	131 1/2	131	129 1/2
Kansas City	131 3/4	102 1/2	125 1/2	128 %	130 %	129 %	128 3/4	129 1/2	129 %	129 1/2	129 1/2	126	127 3/4	126 %	127 3/4	127 1/2	128 1/2
Minneapolis	145 %	115 1/2	139	142 1/4	144 %	143 1/4	142 3/4	143 %	143 3/4	144 1/4	141 3/4	140 5/8	141 7/8	140 1/2	142	141 1/2	141 7/8
Duluth, durum	151 %	120	145 1/4	149 1/4	149 %	147 7/8	147	147 1/2	148 1/2	151 %	150	150 1/2	151 3/4	150 1/4	151 1/2	150 3/4	150 3/4
Milwaukee	137 1/4	98 %	131 1/8	134 3/4	136 %	135 1/4	134 1/2	135 %	135 1/4	135 %	132 %	131 3/4	133 1/2	132 1/4	134	133 3/4	....
	Option		Corn														
	High	Low	Dec. 23	Dec. 24	Dec. 26	Dec. 28	Dec. 29	Dec. 30	Dec. 31	Jan. 4	Jan. 5	Jan. 6	Jan. 7	Jan. 8	Jan. 9	Jan. 11	Jan. 12
Chicago†	111 3/4	85 1/4	104 3/4	105 %	106 1/2	105 7/8	106 1/4	107 %	108 1/2	110 %	109 3/4	109 1/8	110 3/8	110 1/2	110	110 3/8	111 3/8
Kansas City	114 1/2	89 3/4	108 1/4	108 %	109 3/4	109 3/4	109 3/4	111 1/8	111 1/8	113	112 %	112 %	113 5/8	113 1/4	114	113 1/2	113 7/8
Milwaukee	107 %	88	103 1/3	103 %	104 %	104 %	104 1/4	105	106	107 %	106 1/4	104 %	106 1/2	105 %	107	107 1/2	....
	Option		Oats														
	High	Low	Dec. 23	Dec. 24	Dec. 26	Dec. 28	Dec. 29	Dec. 30	Dec. 31	Jan. 4	Jan. 5	Jan. 6	Jan. 7	Jan. 8	Jan. 9	Jan. 11	Jan. 12
Chicago	53 3/4	38 3/4	50 %	51	51 %	51 1/4	50 %	51 5/8	51 3/4	52 1/4	52	52 %	53 3/8	52 3/4	53 1/8	53	53 3/4
Winnipeg	55 1/2	42 1/4	50 1/2	52 1/4	....	51 7/8	51 1/2	52 3/8	52 3/4	53 1/2	52 1/2	53	54 1/4	54 1/4	55	55	55
Minneapolis	51 7/8	39	48 3/4	49 1/2	50	49 %	49 3/8	50	49 3/4	50 %	50 1/4	50 %	51 1/4	50 7/8	51 1/2	51 1/4	51 3/4
Milwaukee	53 %	40 %	50 3/8	51 1/8	51 %	51 1/4	51	51 1/8	51 7/8	52 7/8	52 1/2	52 3/8	53 1/4	52 7/8	53 1/4	53 1/8	....
	Option		Rye														
	High	Low	Dec. 23	Dec. 24	Dec. 26	Dec. 28	Dec. 29	Dec. 30	Dec. 31	Jan. 4	Jan. 5	Jan. 6	Jan. 7	Jan. 8	Jan. 9	Jan. 11	Jan. 12
Chicago	119 3/4	75 1/2	110 %	115 1/4	117 1/4	116 1/2	115	116 3/4	115 3/4	116 1/2	113	112 3/4	114	112 3/8	113 3/8	112 1/4	112 1/2
Minneapolis	114 3/4	73 1/4	105 3/4	109 %	112 1/2	111 3/4	109 %	111 7/8	111 1/2	111 3/4	109 1/4	108 5/8	109 5/8	107 3/4	108 3/8	108	107 7/8
Winnipeg	114 7/8	62 %	104 3/4	109 %	....	112 7/8	110 3/4	112 3/4	111 1/4	112 1/4	108 3/4	108 1/2	109 5/8	107 3/4	109 %	107 1/2	107
Duluth	111	76 1/2	104 3/4	108 %	111	110 3/4	108 %	110 %	110 3/4	110 %	108 1/4	107 %	108 %	106 3/4	....	106 %	106 7/8
	Option		Barley														
	High	Low	Dec. 23	Dec. 24	Dec. 26	Dec. 28	Dec. 29	Dec. 30	Dec. 31	Jan. 4	Jan. 5	Jan. 6	Jan. 7	Jan. 8	Jan. 9	Jan. 11	Jan. 12
Minneapolis	81 3/4	60 1/2	78 %	80 1/4	80 %	79 5/8	79 1/4	79 3/4	79 %	80 1/4	79	79 1/2	79 7/8	79 1/2	80 %	80 %	81
Winnipeg	85 1/4	50 %	72 3/4	75 1/4	....	75 7/8	74 1/2	76 %	77 %	79 %	77 7/8	79 %	81 1/8	80 %	81 1/8	83 3/8	85 1/4
	Soybeans																
	High	Low	Dec. 23	Dec. 24	Dec. 26	Dec. 28	Dec. 29	Dec. 30	Dec. 31	Jan. 4	Jan. 5	Jan. 6	Jan. 7	Jan. 8	Jan. 9	Jan. 11	Jan. 12
Chicago	161	120 1/2	151 1/2	153 1/4	155 1/2	155	154 1/2	155	155 1/4	158	157 %	157 1/4	160 %	159 1/2	160 3/4	161	160 1/2

*At daily current rate of exchange. †New style.

Social Security Records and Forms

By WM. KIXMILLER in Foundation Guide for Pay Roll Taxes

Necessity for Records. It is impossible to emphasize too strongly the necessity for keeping complete and accurate payroll and employment records after January 1, 1936. The penalties are severe, amounting to as high as a fine of \$10,000 and five years' imprisonment. Every act or omission constitutes a separate offense. The governments will be strict, and they necessarily must be because of the tremendous problem of administration involved. It is estimated that there will be from 20,000,000 to 30,000,000 persons covered by the unemployment and old-age annuity provisions of the Social Security Act. A government clerk can handle the records of about 100 persons. This will mean the employment of about 300,000 government clerks by the United States and as many again by the states. This appalling administrative problem will make it essential for the governments to lay down ironclad rules from which there can be no deviation.

Thus every employer who is subject to the least suspicion, and one without good records will look suspicious, may be severely treated. This is inevitable. To make the plan work, every violator, no matter how small the violation, must be treated summarily. Administrative difficulties require it. Ignorance of the law is no excuse. Do not delay. Act now. Do not take a chance on being criminally prosecuted. Keep records up to date.

Aside from embarrassment with the government, an employer must keep accurate records to safeguard a profitable return from his business. The employer's tax will in a few years amount to 6 per cent of the payroll, and perhaps more. This does not include employees' taxes, which will be at least 3 per cent and may run higher. This means an annual tax, in addition to all other taxes, of at least \$930 on a payroll of \$10,000. If the employer's tax is not properly added to the cost of doing business, a profitable enterprise may soon become unprofitable. Not only that, but a firm which fails to set up the proper reserves may suddenly find itself lacking liquid assets with which to pay its tax.

Regulations have been issued by the United States Treasury Department, outlining the accounting and permanent record requirements for the unemployment insurance section of the Social Security Act. These regulations are in part as follows:

Government Regulations. Pursuant to the provisions of the Social Security Act, Treasury Decision 4616, approved December 20, 1935, prescribed the following regulations with respect to the records to be maintained for the purposes of the excise tax imposed by title IX (Unemployment Tax of) that Act.

"Art. 1. As used in these regulations, the terms defined in paragraphs D and F, shall have the respective meanings therein assigned to them.

"Art. 2. (a) Every person subject to tax under the Act shall, during the calendar year 1936 or any calendar year thereafter, for each such calendar year, keep such permanent records as are necessary to establish:

"(1) The total amount of remuneration payable to his employees in cash or in a medium other than cash, showing separately, (a) total remuneration payable with respect to services excepted by section 907 (c), (b) total remuneration payable with respect to services performed outside of the United States, (c) total remuneration payable with respect to all other services.

"(2) The amount of contributions with respect to employment during the calendar year paid by him into any State unemployment fund, showing separately, (a) payments made and not deducted (or deductible) from the remuneration of employees, (b) payments made and deducted

(or deductible) from the remuneration of employees, (c) payments made with respect to services excepted by section 907 (c).

"(3) Such other information as will enable the Commissioner to determine whether such person is subject to the tax, and, if subject to the tax, the amount thereof.

"(b) No particular method of accounting or form of record is prescribed. Each person may adopt such records and such method of accounting as may best meet the requirements of his own business, provided that they clearly and accurately show the information required above, and enable him to make a proper return on the prescribed form.

"(c) Records are not required to show the number of individuals employed on any day, but must show the total amount of remuneration actually paid during each calendar month and the number of individuals employed during each calendar month or during each such lesser period as the employer may elect.

"(d) Any person who employs individuals during any calendar year but who considers that he is not an employer subject to the tax should be prepared to establish by proper records (including, where necessary, records of the number of persons employed each day) that he is not an employer subject to the tax.

"Art. 3. All records required by these regulations shall be kept safe and readily accessible at the principal place of business of the person required to keep such records, or at such other place or places as the Commissioner, upon written application by the person concerned, may approve. Such records shall at all times be open for inspection by internal revenue officers, and shall be preserved for a period of at least four years from the due date of the tax for the calendar year to which they relate."

The Social Security Act also provides that sections 1102 and 1114 of the Revenue Act of 1926 shall apply to the matter of accounting and records for the purposes of enforcing the former Act. These sections read in part as follows:

"Section 1102. (a) Every person liable to any tax imposed by this Act, or for the collection thereof, shall keep such records, render under oath such statements, make such returns, and comply with such rules and regulations, as the Commissioner, with the approval of the Secretary, may from time to time prescribe.

"(b) Whenever in the judgment of the Commissioner necessary he may require any person, by notice served upon him, to make a return, render under oath such statements, or keep such records as the Commissioner deems sufficient to show whether or not such person is liable to tax."

"Section 1114. (a) Any person required under this Act to pay any tax, or required by law or regulations made under authority thereof to make a return, keep any records, or supply any information, for the purposes of the computation, assessment, or collection of any tax imposed by this Act, who wilfully fails to pay such tax, make such return, keep such records, or supply such information, at the time or times required by law or regulations, shall, in addition to other penalties provided by law, be guilty of a misdemeanor and, upon conviction thereof, be fined not more than \$10,000, or imprisoned for not more than one year, or both, together with the costs of prosecution."

Foundation Forms Based on Regulations. The Foundation Forms have been drafted in reliance on the above regulations, as well as on the Social Security Act itself and the state laws and regulations. These Forms comply with all laws and regulations. Foundation Forms have been so carefully drawn that they may be used by any business. They embody the fundamental principles of good accounting besides providing for the records required under the Social Security Act and other laws as indicated above.

The volume, "Foundation Forms—Weekly

Payroll Records," provides a method of including these tax items as part of the weekly payroll records. It is also necessary to provide on the payroll sheet for the tax deductions to be made from an employee's salary in order that the check may be drawn for the proper amount. In addition, a permanent record of an employee's services and earnings is necessary for quick reference purposes, and these are provided for in the volume, *Employees' History and Record*.

There are other new items each business must record and preserve for forty years or more where young people are employed. These are: date of employment; date of discharge and the reason therefor; the employee's age; kind of work; place where employment contract is made and work is performed; employee's scheduled hours; the weekly hours of each employee; and the weekly wages paid him. As all remuneration for employment, whether in cash, tips, direct living needs, or some other form, is taxed, it will be necessary to include these items on the records in such a way that a tax collector or investigator may determine the total remuneration paid an employee.

Time for Payment. The federal unemployment tax is levied on an annual basis and may be paid quarterly, beginning January 31, 1937, covering the tax levy for 1936. The state unemployment taxes will be payable at least quarterly, and perhaps monthly or even weekly. This will depend on the state regulations. Also, benefits in the states will be paid on the basis of the employee's weekly time and earnings, making it necessary to keep records on a weekly basis. Provision is also made for the federal old-age annuities tax, which begins in 1937.

Permanency. Payroll and employment records must be kept permanently. This is true because in many cases no question will arise until the time benefits become payable. For those workers now in their twenties, who will not collect old-age benefits until they attain 65, this means a period of over forty years. In the case of unemployment benefits the period of credits might readily run for a similar length of time.

Legislation Required to Continue Burocratic Activities

Besides the necessity of appropriating \$500,000,000 if the A.A.A. is to continue its vast benefit payments, a number of other federal activities must end by June 30, 1937, the deficiency appropriations act of 1936 providing that "none of the following emergency agencies shall continue to function after June 30, 1937, unless established by or pursuant to law":

Commodity Credit Corporation.
Surplus Commodities Corporation.
Federal Farm Mortgage Corporation.
Reconstruction Finance Corporation.
RFC Mortgage Corporation.
Public Works Administration.
Federal Home Loan Bank Board.
Home Owners' Loan Corporation.
Federal Savings and Loan Insurance Corporation.

Federal Housing Administration.
Electric Farm and Home Authority.
Export-Import Banks of Washington.
The Resettlement Administration is legally authorized to continue only during the present fiscal year.

Taxpayers will find great relief in the abolition.

The U. S. Circuit Court of Appeals at New Orleans, La., ruled Jan. 8, that processors cannot bring suit against collectors of internal revenue for recovery of processing taxes, upholding the provision of the revenue act of 1936 that no refund can be allowed unless the claimant proves he paid the tax and bore the burden or had repaid the tax to his vendee who had borne the burden.

Concrete Grain Elevator of Omar Mills, Inc., Denver, Colo.

In designing a grain elevator for Omar Mills, Inc., Denver, Colo., it was decided to construct one capable of the dual function of operating either as a grain handling terminal or as a mill elevator. The elevator built efficiently serves its intended purpose. Grain is dropped from cars on either of two railroad tracks into a carload capacity track sink and removed by a 36" rubber belt conveyor discharging into the boot of the receiving elevator leg in the headhouse. The cars are unloaded by the use of power shovels. Grain is elevated to either of two 2500-bu. capacity garnerers located in the cupola. From the garnerers grain is dropped into a 2500-bu. hopper scale, from which it is carried to the storage bins by means of a 36" belt conveyor, or spouted direct to headhouse bins or to cleaning bins serving as carlot garnerers located under the scale hopper and directly above the cleaning machine on the work floor. All of the headhouse bins can be drawn off directly or thru a mixing hopper, located on the work floor, to the elevator boots in the basement.

The truck dump shed on the opposite side of the headhouse houses two gravity receiving pits, a 34'0"x10'0" platform, 20-ton capacity scale and truck dump, weigh office and locker room and toilet facilities for the elevator employees; also, toilets and showers for farmers and truckers who deliver wheat to the elevator. Grain from trucks is dumped into either of two receiving pits. The discharge of each pit to the leg in the headhouse serving both receiving pits is controlled by separate valves. Thus it is possible without any delay to weigh, classify or separate various kinds of truck grains upon their receipt.

Grain is drawn from the storage bins onto a 30" belt conveyor in the basement. This conveyor returns the grain to the headhouse where it is prepared for milling or is otherwise processed or is elevated, weighed and spouted to railroad cars. The elevator legs are equipped with 72"x18" rubber covered head pulleys running to 31 R.P.M. with 16"—7 ply rubber belts bearing 7x14" V-type buckets at 10" centers, giving a capacity of 6,000 bus. per hour per leg. Each leg is driven by a 50 H.P. motor through speed reducers and double strand roller chain drives.

The three interstice bins of the storage annex nearest the mill are in turn subdivided into three bins, giving nine small bins which are used for storing and classifying the grain ready for milling and are designated as the milling bins. The grain from these nine bins is conveyed thru the storage basement tunnel to the mill building adjacent to the elevator.

The headhouse has been planned so that the storage capacity can be increased by the addition of another storage annex. The capacity of the grain handling equipment, electrical work, and space requirements of the headhouse have all been planned to allow for this future additional storage capacity. Only one scale has been installed, but space has been allotted for one additional hopper scale. The future scale garner and scale hopper bottom are now used as a collecting garner under the elevator heads for the purpose of collecting, bypassing and distribution of grain which does not need to be weighed.

Space has been provided for the installation of a future elevator leg to serve additional grain cleaning machines.

The elevator is equipped with a dust collecting system including suction to elevator heads and boots, conveyor loaders and discharge heads, suction to cleaning machine, suction to track sink receiving belt and floor sweeps throughout the building and dust storage bin. All sheet metal wind trunking and installation of the dust collecting system was made by the sheet metal

workers in the employ of the milling company, who were at the same time installing the sheet metal, spouting, etc., in the mill building.

All electric motors were furnished by the Allis-Chalmers Co. The 2500-bu. hopper scales were furnished by Fairbanks-Morse. Cleaning machine is a No. 11 Eureka cleaner by the S. Howes Co. The truck dump hoist for the 34'0"x10'0" dump scale is of the overhead type. The employees' belt elevator from the basement to the top story of cupola is the photo-electric cell, "Electric eye" type. Provision has been made for the complete installation of a Zeleny thermometer system in all storage bins but only such parts of the system as needed to be installed during the construction period were put in.

Bids for the building construction of the mill and elevator as one contract were presented, based on the plans and specifications prepared by Horner & Wyatt, consulting engineers, and a contract for this part of the work was awarded to J. T. McDowell on April 15, 1936. The first grain was received on Sept. 4, 1936.

The elevator is a unit of a completely new plant located in Denver to serve that territory. Other parts of the new plant include a new flour mill building which is noteworthy on account of a number of revolutionary ideas incorporated in its construction. Among them is the use of the battery system of rolls located on the fifth floor, under the purifiers and above the sifters; the use of Insulux glass block panels in place of the conventional windows; and a com-

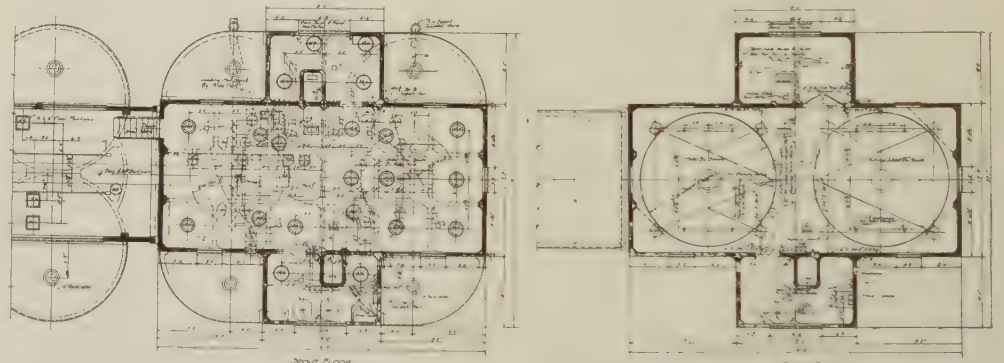
plete air conditioning and humidity control system by The Carrier Corporation.

An office building and laboratory to serve the plant and house the activities of the regional office force who direct the operations in that district is also provided. Since the plant is outside the city limits, it was also necessary to provide a deep well and water supply system, sanitary and sewage disposal facilities, heating plant, fire protection, etc., to make the plant complete in itself.

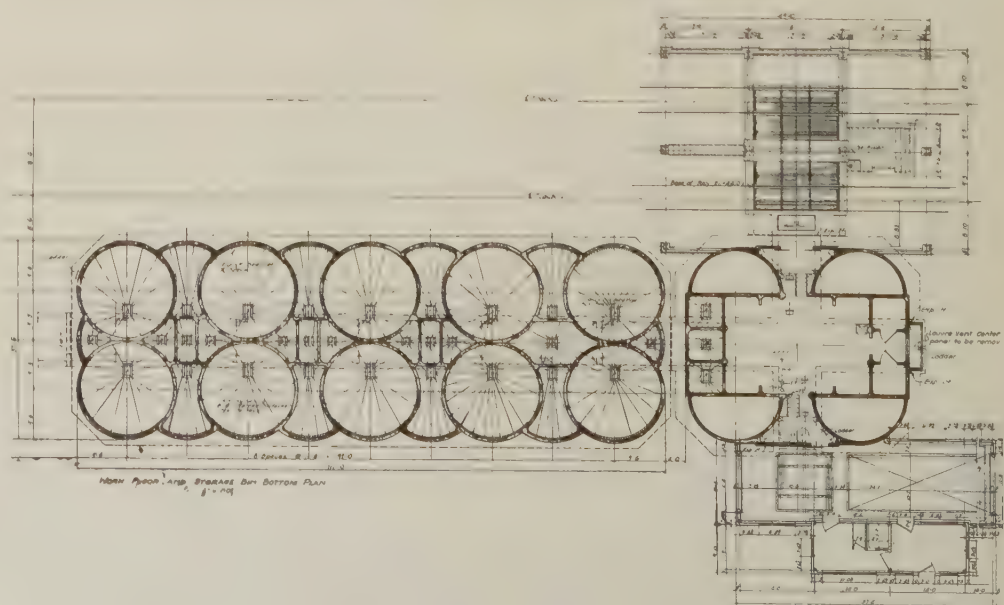
The new plant is owned and operated by the Omar Mills, Inc., of Omaha, Nebr., and Denver, Colo. Mr. W. J. Coad is president; W. J. Coad, Jr., is sec'y; L. L. Breitenbach is vice-president; Harold Roth, who was formerly general sales manager, is general manager of the Denver plant, and Leo Bendure is head miller in charge of all milling operations. The design of the plant and the supervision of construction was by Horner & Wyatt.

St. Louis, Mo.—National Oats Co. earned \$258,000 during the year ended Dec. 31, estimated J. R. Matthews, pres., an equivalent to \$2.58 a share on the 100,000 of no par capital stock outstanding. Net profit in 1935 was \$147,162, or \$1.47 a share.

It should be noted that the American markets have scored a very rapid advance since Dec. 1 and have quite outrun the Liverpool market which, as will be seen from the following tabulation, has ignored largely the advance in North American and has gained only the approximate equivalent of the small advance in Argentine wheat prices, and the relatively larger advance in ocean freights, e. g., Liverpool May gained 10½ cents whereas the advance in Buenos Aires was 5½ cents and ocean freight 3¾ cents; total 9¾ cents.—W. D. S. Sanday, of Thomson & McKinnon.



Spout Floor—Omar Mill Elevator, Denver—Scale Floor



Plan of Work Floor and Storage Bin Bottoms of Omar Mills Elevator
[See facing page]

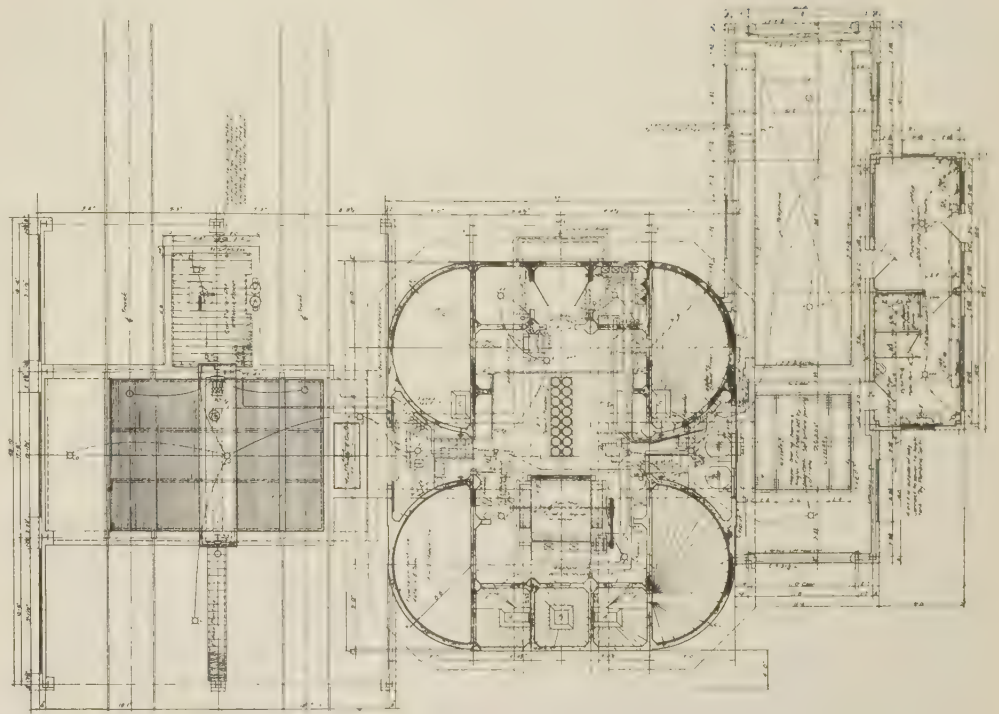
Illinois Tests Grain Fumigants

Carbon bisulfid is doubtless the most effective material for grain fumigation now in general use. This, however, is highly explosive and inflammable, and it is very desirable that a fumigant less dangerous to life and property be found.

A search for such a fumigant is being made by M. D. Farrar, Illinois Natural History Survey, in cooperation with the Illinois University Departments of Agronomy and Animal Husbandry. Because practically all materials must be checked at different temperatures, a long time is required to complete these tests.

Part of the tests have been conducted in the fumigation chamber in the Agronomy field laboratory on the University farm and a larger part in the grain elevator and mill of the Animal Husbandry Department. Materials under test are: carbon dioxide and methyl formate; carbon dioxide and methyl bromide; carbon tetrachloride and ethylene dichloride; and cyanide dispersed thru a new commercial blower. To date the carbon tetrachloride and ethylene dichloride is the only mixture showing sufficiently good results to be considered as a possible fumigant for grain bins.

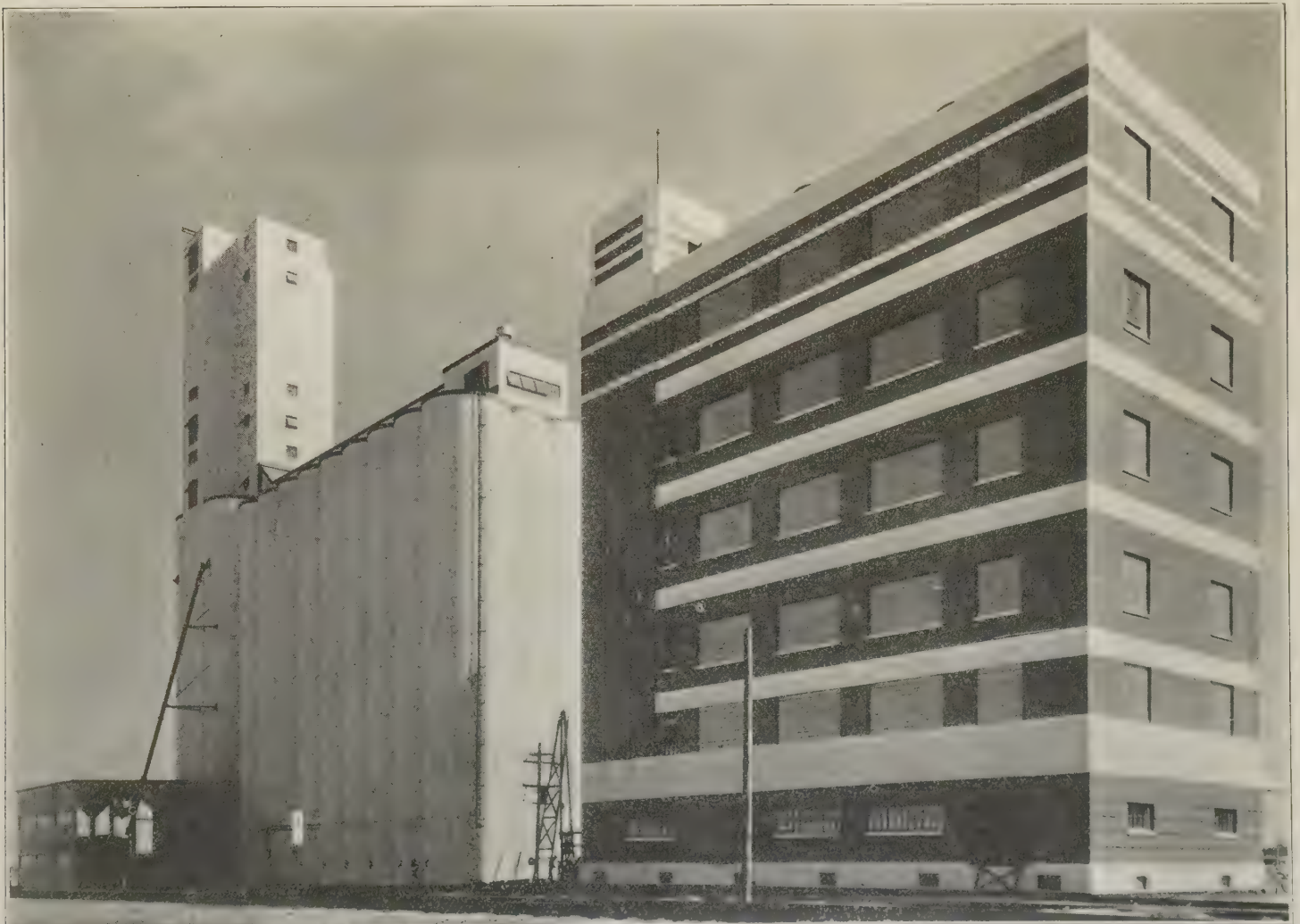
A corn limit will be established under the 1937 conservation contract. The establishment of this limit should cause larger plantings of small feed grain crops which serve serving crops. It should also result in an acreage of corn possibly a little below that as a nurse crop for legumes and other planted in 1936, said J. B. Huston, assistant administrator of the A. A. A.



Plan of Work Floor of Headhouse, Track Shed and Truck Dump, Omar Mills Elevator

Washington, D. C.—The Commodity Credit Corp., has announced intention to sell 3,000,000 bales of 12c loan cotton at 12.5c or better per lb. on Feb. 1.

Washington, D. C.—The federal Social Security Board has approved unemployment compensation laws adopted by Maine and New Jersey.



Modern Mill Elevator of Omar Mills, Inc., Denver, Colo.
[See facing page]

Estimating Quantities of Grain for Warehouse Accounting

By Frederic C. Dobson
Copyright, 1936, by Frederic C. Dobson, Chicago

CHAPTER VI.—ESTIMATING QUANTITIES OF GRAIN

[Concluding a series of articles on estimating grain that began July 22, page 65.]

When the PFCs and MDs of any group of bins have once been established and the applicable rates of packing effect have been determined, according to the methods provided in Chapter V and Chapter IV, respectively, estimating the quantity of grain they contain becomes simply a matter of measuring the unoccupied space in each bin and applying the proper formulae to determine (1) the depth of grain, (2) the actual volume, (3) the "hypothetical weight", and finally (4) the estimated weight.

It has been shown in Chapter I that when packing effect is disregarded, a legal bushel of standard weight grain should occupy exactly the space of one Winchester bushel and for each pound the test weight exceeds or lacks the standard, the capacity of the Winchester bushel is increased or decreased by one pound of grain. The space, in Winchester bushels, that a specified poundage of grain would be expected to occupy, disregarding packing effect, has been termed the theoretical volume, and is: The total weight of the grain, in pounds, divided by its test weight.

Reversing this hypothesis—when packing effect is disregarded, the weight of one Winchester bushel of standard weight grain should exactly equal one legal bushel of that grain, and for each pound the test weight exceeds or lacks the standard, the weight of each Winchester bushel of that grain would be increased or decreased by one pound. The poundage that a specified volume of grain would be expected to weigh, disregarding packing effect, can be termed the hypothetical weight, and is: The volume, in bushels, multiplied by the test weight.

Experiments have shown (Chapter II) that the rate of packing effect varies in grain of different test weights and in different bins, and have provided a method (Chapter IV) of determining these various rates of packing effect. The packing effect has been defined as the difference between the theoretical volume and the actual volume, and its rate has been determined as a ratio of packing effect to actual volume—or a percentage of actual volume. The hypothetical weight represents the poundage a specified volume of grain would be expected to weigh were it not for the packing effect. Therefore, the hypothetical weight, plus the hypothetical weight multiplied by the proper rate of packing effect, should equal the actual weight of the grain. However, since the exact weight of a specified volume of grain cannot be determined by even the most accurate measurement and calculation, this result can better be termed the estimated weight.

This estimating method can be expressed as a simple formula that can be applied to any bin of any grain. Let D = depth of grain; MD = mean depth of bin; S = depth of unoccupied space above grain; V = volume of grain, in Winchester bushels; PFC = per foot capacity of bin; HW = hypothetical weight; TW = test weight; $\%PE$ = rate of packing effect, in terms of per cent of actual volume; SW = standard weight of the particular grain in question; and EW = estimated weight. Then:

- (1) $D = MD - S$
- (2) $V = D \times PFC$
- (3) $HW = V \times TW$
- (4) $EW = HW + HW \times \%PE$, or $EW = HW \times (1.0 + \%PE)$.

Combining all four formulae:

$$(5) EW = (MD - S) \times PFC \times TW \times (1.0 + \%PE).$$

For a result reading in legal bushels rather than pounds:

$$(6) EW \text{ (in legal bushels)} = \frac{(MD - S) \times PFC \times TW \times (1.0 + \%PE)}{SW}$$

The simplicity of the application of this formula in estimating practice can be illustrated in the following example:

Required: The estimated weight, in legal bushels, of a quantity of 56.5 pound rye, stored in a circular concrete bin of 22' diameter, with a MD of 107½', when the depth of the unoccupied space above the grain is 6'. Values for the factors in formula (6) become: $MD = 107.5'$, $S = 6'$, $PFC = 306$, $TW = 56.5$, $SW = 56$, and $\%PE = 10.66\%$ (determined directly from the chart in Chapter IV, for 56.5 pound rye in a concrete bin of this size and depth). Substituting these values in the formula it becomes:

$$EW = \frac{(107.5 - 6) \times 306 \times 56.5 \times (1.0 + 0.1066)}{56} =$$

34,677 bushels, the estimated weight, in legal bushels, of the rye in this bin. (The actual weight of this grain was known to be 34,667 bushels.)

Upon the simplicity of the application of this formula and the extreme flexibility of the one factor " $\%PE$ " is based the writer's claim of accomplishment of the major objective indicated in Chapter I: To provide a method of closely estimating quantities of grain of sufficient flexibility to permit its adaptation to any type of elevator, storing any or all grains, and sufficiently simple to allow its practical use.

If future experiences and research provide more accurate values for the factor " $\%PE$," the method can be refined without materially affecting its basic structure.

In using this method, it should be remembered that the success of all estimating depends vitally on the estimator's determination of the following factors: (1) the exact space above the grain, allowing for the pile or depression; (2) the carefully calculated MDs and PFCs of the bins; (3) the exact test weight, including dockage; and (4) the carefully computed rate of packing effect.

20. Hypothetical Weight is the poundage that a specified volume of grain would be expected to weigh if test weight conditions prevailed in commercial handling. Hypothetical weight of any lot of grain is its actual volume multiplied by its test weight.

From Abroad

Mexico City, Mex.—El Salvador reduced the duty on wheat imported from any origin from \$8.80 to \$5 per 100 kilos, effective Jan. 1.

London, Eng.—Britain has issued the Import Duties (drawback) (No. 9), Order, 1936, amending the previous order, which allowed a drawback on soybeans processed for oil. The amendment extends the drawback to soybean oil used in canning fish for export. Soybean oil is largely replacing olive oil in Britain for this purpose.

Buenos Aires, Argentina, Jan. 2.—Threshing of wheat is in full swing. Yields in the north are excellent with probable record yields in the provinces of Cordoba and Santa Fe. In the south there has been some frost damage, and in the western part of Buenos Aires Province an early drouth reduced yields. The wheat crop is officially estimated at 249,855,000 bus., compared with 141,021,000 bus. last year; rye, 8,858,000 bus. compared with 5,000,000; barley, 56,493,000 bus. compared with 35,825,000; oats, 31,232,000 compared with 21,127,000.—Paul O. Nyhus, Agricultural Attache.

Favored Trade for Argentine

Argentina and the United Kingdom have concluded a new agreement under which the United Kingdom has bound the tariff on Argentine wheat at the present rate, equivalent to 6½c a bu. applicable to wheat imports from countries outside of the British Commonwealth of Nations, and Argentina has continued guarantees in exchange authorized under the previous agreement in so far as they may be applicable.

The Argentine government has suspended for the 1937 season the official minimum wheat price to growers. Australia has concluded a new treaty with France under which Australian wheat imports into France will be subject to the minimum tariff rate, equivalent to \$1.01¼ instead of the maximum rate equivalent to \$2.03½ a bu. The Australian government has again provided aid to wheat growers thru the allocation of a sum equivalent to over \$9,000,000 to the various states.

France Permits Milling of Wheat in Bond

A modified system of milling wheat in bond was established in France by decree Oct. 29. This replaces the milling-in-bond regime existing under the old temporary-admission system, which was abolished by the law of Aug. 15, 1936.

In November, 1930, regulations were issued compelling importers of grain, under threat of penalty, to export the total amount of products derived from the imported product or an equivalent quantity derived from domestic grain. This system continued until the middle of August, 1936, when a new wheat law established the National Wheat Board, which decided to abolish the old milling-in-bond system and establish a modified system. The gist of the new system is:

As an exceptional measure, millers and semolina manufacturers may be authorized to import foreign wheat under the conditions of the present decree and after having paid the customs duties and taxes levied, in compensation of prior export, either of wheat or other domestic grains or flours and farinaceous products of wheat.

Prior export authorizations will only be granted up to July 31, 1937.

These operations are made for the account of the Wheat Office by application of the provision in article 16 of the law of August 15, 1936.

A French miller who desires to import foreign grain must first export domestic wheat, flour, or wheat by-products in quantities considered by the authorities as equivalent to the amount of wheat to be imported. Authorization to import cannot be obtained until documents proving previous exports of the required wheat or wheat equivalents are presented. On receiving the foreign wheat, the miller must pay the usual customs duty and such other taxes as are provided. In return for having exported his products at world market prices, the National Wheat Board grants him a drawback which was fixed on Nov. 7, 1936, at approximately the amount of the customs duty.

For the present the following types of transactions, which were in effect prior to the passage of the law of Aug. 15, 1936, may be utilized:

For every 100 kilos of grain imported, there must have been exported 127 kilos of French wheat; or 100 kilos of a combination of bread-wheat flour, low-grade flour, and bran; or 100 kilos of a combination of middlings, low-grade flour, and bran; or 96.5 kilos of a combination of ship-biscuit, low-grade flour, and bran; or 98 kilos of products from durum wheat made up of semolina, bran, and low-grade flours; or 95 kilos of durum paste and bran. Upon importation the grain must go directly to the mill for milling. Any direct or indirect sale of wheat imported in compensation for prior export is forbidden.

Iowa farmers annually spend about \$6,000,000 for fence posts, estimates the Iowa State College.

Iowa Has Another Modern Elevator in Operation

Remsen, Iowa, a thriving town on the I. C. R. R. between Lemars and Cherokee has a new modern elevator. The Farmers Cooperative Elevator Co. has just started operating it so it will be prepared to handle the big 1937 crop efficiently. This replaces the old elevator burned last July 4th. The owners had a real Opening Day Jan. 8 and invited the public to come in to inspect the new buildings.

The new modern plant includes a grain elevator, a warehouse, feed mill, main office and a store building. A complete basement extends under all of the buildings. The elevator has a heavy slab type foundation and special steel lined boot tank of concrete is fitted with one leg, having D. P. buckets; a 7½ H.P. enclosed type Fairbanks Motor, with a Winters Head Drive. Storage room is divided into 12 bins.

An Ajax oat huller and a Carter cleaner is located on the workfloor. A special dust house was built separate from the elevator.

The receiving scale with concrete deck is a 20 ton 24' scale manufactured by the Fairbanks Morse Co., and is located outside of the office building.

A Richardson 2000 bu. Automatic Scale is used for shipping purposes, and is located in the cupola of the elevator. A modern manlift gives easy access from the workfloor to the two floors in the cupola. Facilities were provided for loading cars, as well as wagons, thru the Automatic Scale.

A cross type workfloor was provided in the elevator for the cleaning machines.

In the basement, under the elevator, provision was made for equipment for unloading cars.

A driveway attached to the main elevator was fitted with an Air Dump, 72" lift, and is fitted with an air compressor and 2 H.P. motor, with Tex Rope Drive. A grate 6 x 14 ft. was installed in the driveway for receiving grain. Special Folding Type Doors were used in the driveway doorways.

The mill building, which is attached and sets across from the Elevator, is connected to the cupola of the elevator by a direct spout. It

contains 10 bins, and is fitted with a modern attrition mill. It has 2 Legs, 2000 lb. batch mixer, a corn crusher and cracker and a special corn grader.

Special spout fittings and fixtures are installed thruout the mill, as designed and installed by the T. E. Ibberson Co. The interior of the mill was painted three coats of White Enamel and presents a clean, attractive appearance. Steam heat was installed thru a radiator service for heating the feed mill unit.

A warehouse, as shown in the photograph, was provided with a full basement containing a cold storage plant, and service for receiving and shipping live chickens. An electrical freight elevator of two ton capacity gives service from the 1st floor to the basement.

The Warehouse is provided with special concentrate bins and a special room, mouse proofed and ventilated, for storage of flour, the balance of the warehouse being used for the storage of feed and seeds. Special type ventilators were designed and fitted to all of these buildings.

The Office Building is attached to the driveway and is fitted with special furniture, filing cabinets, and desks, which were built in as a part of the building at the time it was constructed. This building is finished on the inside with pressed steel, painted, and all woodwork is stained and varnished.

In the Store Building, a special provision was made for displaying merchandise handled and special equipment was installed for receiving and shipping cream and eggs.

A central heating plant was located in the basement of the office building for heating the various rooms, such as the store, office, basement of the warehouse and the feed mill building.

A special driveway was provided on the side of the feed mill for loading out bulk feeds. Special loading platforms, to and from the warehouses and feed mills were provided.

All outside of the buildings, roofs and walls in-

clusive, are covered with galvanized iron of heavy gage.

A large storage tank was sunk in the ground for serving gas to customers, thru a 10 gal. metering type pump. This company operates its own trucks and does a wholesale and retail business in grain, seeds, feeds, poultry, cream and eggs. The T. E. Ibberson Co. designed and built this plant.

This town is located on the Illinois Central Railroad, Remsen being between Lemars and Cherokee, Iowa, in Plymouth County.

Protein Survey of Canadian Hard Wheat

A total of 9,810 samples were collected for the 10th annual protein survey of western Canada hard red spring wheat, as reported by W. F. Geddes and W. J. Eva, of the Grain Research Laboratory, Winnipeg. The samples showed this year's crop to have the highest protein content on record. The general mean for the crop is 14.9%, a figure 1% higher than has been recorded in any previous survey.

"The extremely high protein content of the 1936 crop is directly attributed to hot, dry weather, which prevailed thruout the Prairie Provinces during the growing season," says the laboratory.

A colored map insert in the report shows that the increase in the general mean protein content is due chiefly to expansion of the high protein areas rather than to greatly increased levels in areas normally producing high protein wheat. Most of the areas show a protein range from 13 to 17%, but there is a generous splashing of red on the map, showing protein areas with levels of 17% to 19.9%. The average protein content of the crop is 14.9%.

Country Elevator Sidelines

Even in the western states side lines account for a large share of the business done by country grain elevators. Out of the 1,303 replies received by the Associated Southwest Country Elevators to a questionnaire broadcast to elevators in Missouri, Kansas, Iowa, Nebraska, Illinois, Colorado, Oklahoma and Texas, 600 named commercial feeds among the commodities they sold to farmers, 245 included seeds, 138 flour, 478 coal, 256 mill feeds, 52 hay, 77 cottonseed products, 138 salt, 1 soy beans, 42 gasoline, 63 oil, 83 farm machinery, 31 fertilizer, 10 general merchandise, 38 tankage, 28 fencing, 79 building material, 24 hardware, 17 posts, and 85 lumber.

Since the question, "What other commodities do you sell to farmers?" involved no list for checking off the various commodities it is likely that those making replies overlooked mention of some of the seasonal items that they handled, and may have been confused by the term "commodities." It is a known fact that many of the elevators in Iowa, Illinois, and Missouri, in addition to the commodities named, handle baby chicks, poultry equipment, poultry and livestock remedies. Likewise, altho only 38 named tankage as a commodity handled, those who handle tankage also handle meat scrap. And there is a marked tendency for many elevator operators to include these specific commodities in the general term, "commercial feeds."

The weight of the sideline business centered in elevators in states bordering the Mississippi river, the so-called "corn-belt elevators," naturally, 105 of the 153 replies from Missouri naming commercial feeds, as an example; but a good scattering of the sideline business also appears in the western and southwestern states. For instance, out of 47 replies received from Texas, 20 named commercial feeds as a sideline, and out of the 21 replies from Colorado 8 named this commodity.



The Completion of This Improved Plant Was Celebrated with an Opening Reception January 8th.

Regulations under New Illinois Storage Law

In conformity with the new law requiring Class B warehouses to be licensed the Illinois Commerce Commission has promulgated the following regulations:

Rule I—Definitions.—(a) For convenience, the Act entitled, "An Act to regulate public warehouses, and the warehousing, inspection, purchase, sale, and contracts for purchase and sale of grain, and to give effect to Article XIII of the Constitution of this State," approved April 25, 1871, as amended, shall be referred to and known in this order as the "Grain Warehouse Act."

(b) For convenience, the Act entitled, "An Act in regard to warehouse receipts," approved May 29, 1907, in force July 1, 1907, shall be referred to and known in this order as the "Warehouse Receipts Act."

Rule II—Application.—(a) Before accepting grain for storage, or engaging in the business of storing grain for others, the operator of a Class B warehouse, as defined in the "Grain Warehouse Act," shall file, in triplicate, with the Commission, at its offices in Springfield, Illinois, an application, under oath, for a license in accordance with the provisions of the "Grain Warehouse Act," on forms prescribed and furnished by the Commission.

(b) One application, in compliance with the provisions of the Act, shall be sufficient for each operator, irrespective of the number of warehouses being operated, provided such application designates the correct location of each warehouse.

Rule III—Bond or Insurance Policy.—(a) Before a license shall be issued to the applicant, he shall file with the Commission a surety bond or a certified copy of a legal liability insurance policy, in accordance with Section 4 of said "Grain Warehouse Act," said bond or insurance policy to be executed on forms prescribed and furnished by the Commission.

(b) The name and address of the operator and location of each warehouse in the bond or insurance policy shall correspond with the same in the application.

(c) Every bond must be signed by the operator in the same manner as the application, acknowledged before a notary public, and if the applicant be a corporation, the corporate seal should be affixed thereto.

(d) Every bond or legal liability insurance policy so filed shall contain a provision that it may not be cancelled by the principal, assured, indemnitor, surety or insurance company except on fifteen days' prior notice in writing to the Commission at its offices in Springfield, Illinois, and a copy of such notice mailed on the same day to the principal or assured; but said cancellation shall not affect any liability accrued or which may accrue under such bond or insurance policy before the expiration of fifteen days after said notice has been received by the Illinois Commerce Commission.

(e) Failure to keep such bond or legal liability insurance policy in full force and effect shall be cause for the revocation of any license issued.

Rule IV—License.—(a) The Commission will issue a license as provided for by the "Grain Warehouse Act" on compliance with the provisions of said Act and the rules and regulations of the Commission. Said license shall remain in full force and effect until same shall be surrendered or abandoned by said operator, or revoked or cancelled by the Commission for good cause shown as provided by the "Grain Warehouse Act."

(b) The license issued to the operator shall at all times be kept posted in a conspicuous place in the office of each warehouse.

Rule V—Warehouse Receipts.—(a) A warehouse receipt shall be issued to each depositor of grain in accordance with these rules, the requirements of the "Grain Warehouse Act," and the requirements of the "Warehouse Receipts Act" of the State of Illinois.

(b) Such receipt shall also embody within its written or printed terms the following:

1. The name of the operator and the designation of the name, if any, of the warehouse.
2. The kind, grade and number of bushels of grain stored.
3. The name and address of the depositor of such grain.
4. The words, "not negotiable" or "negotiable," according to the nature of the receipt, conspicuously printed or stamped thereon.
5. The date on which the grain is deposited for storage.
6. The duration of storage shall be at the will of the depositor or holders of receipts, unless otherwise specified in the receipt or schedule of rates on file with the Commission.
7. A statement, conspicuously placed thereon, whether or not the grain is insured by the operator, and if insured, to what extent and against what casualty.

8. Receipts must be consecutively numbered and the stubs or copy thereof kept and preserved.

(c) A copy of the form of receipt used by the operator shall be furnished to the Commission with the application for license.

(d) A receipt in conformity with the Warehouse Act and this order must be executed immediately and delivered to the depositor, **provided, however,** operators may issue a temporary receipt for not more than ten (10) days, which temporary receipt shall, as nearly as circumstances permit, comply with the provisions required therein with respect to warehouse receipts.

The operator shall require the holder of a temporary receipt to surrender said receipt, and the operator shall cancel the same upon the issuance by said operator of a permanent receipt.

(e) Operator shall file with the Commission the names of all persons authorized to sign warehouse receipts on behalf of said operator.

Rule VI—Duties of Operator.—(a) All operators shall keep a record of grain stored and receipts issued and cancelled, in some safe place for the keeping thereof provided by the operator, which books and records shall be kept open, for the inspection of the Commission at all times.

(b) Such records shall show the name and address of the depositor of each lot of grain, the kind, grade and number of bushels of grain, the date on which the same is received for storage, duration, if specified, the number of the receipt issued for same, the rate of storage charge, the amount of insurance coverage thereon, if any, and the date of redelivery of such grain to the owner of the grain or the holder of the receipt therefor, and any other information necessary to the proper conduct of such business in accordance with this order. All records shall be kept on file and intact for one year from the closing of any storage transaction.

(c) Each operator of Class B warehouse shall make a monthly written report to the Commission, under oath, in triplicate, on the first day of each month, showing the kind, grade and amount of grain in storage as of the last day of the preceding month, the name of each depositor, and the kind, grade and amount of grain held for each such depositor, and the amount of each kind of grain on hand as shown by the last preceding report. An executed copy of such report under oath is to be kept on file in the office of such operator, such report to be executed on forms prescribed and furnished by the Commission.

(d) Each operator shall keep his warehouse reasonably clean at all times and free from straw, rubbish or accumulations of materials that will increase the fire hazard or interfere with the handling of grain.

(e) In case operator discovers, is advised, or learns that grain in storage is out of condition, or becoming so, he shall immediately comply with Section 16 of the "Grain Warehouse Act."

(f) The operator shall report to the Commission all losses, by fire or other causes, immediately on the occurrence thereof.

(g) The operator shall keep conspicuously posted on the door of the public entrance to his office and to his licensed warehouse, a notice showing the hours during which the warehouse will be kept open.

(h) Each lot of grain received in any public warehouse, for which there has not been a bona fide sale to the warehouse operator, or a bona fide sale has not been consummated within 24 hours after time of delivery, shall be considered as received for storage.

(i) Either a warehouse receipt or a confirmation of sale of each lot of grain received in any such warehouse, shall be executed, issued and delivered during the next business day after such grain has been received in such elevator.

(j) In the case of terminal warehouses, a receipt or confirmation of sale shall be issued and mailed or delivered to the depositor on the business day following the receipt of such grain at such warehouse.

Rule VII—Rates and Charges.—(a) No operator shall accept grain for free storage.

(b) No operator shall make any unreasonable charge for services rendered.

(c) Each operator shall file a copy of his table or schedule of rates for the storage of grain in his warehouse during the ensuing year, with his application. No change of rates shall be made without first notifying the Commission and in accordance with the "Grain Warehouse Act."

Rule VIII—Safeguarding Rights of Depositors of Grain.—On revocation, cancellation or surrender of a license, the Commission will make provision for safeguarding the rights and interests of holders of such warehouse receipts as are outstanding and the rights and interests of owners of grain stored in such warehouse.

Rule IX—Waiver.—The Commission expressly reserves the right to waive compliance with any of the rules and regulations contained in this order which are made for the convenience of the Commission whenever, in its judgment, the public interest will not be injured thereby.

A Galvanized Iron That Holds Paint

Iron is the favored covering for grain elevators of cribbed or frame construction, doing double duty as protection against both weather and locomotive sparks.

An additional incentive to the owner to specify iron covering for sides and roof is the allowance by the insurance companies of 50 cents on roofing and 10 cents on siding for



Photomicrograph of ordinary galvanized sheet enlarged 40 diameters.

metal covering, in recognition of the mutual interest of the owner and the underwriter in preventing loss by fire and to eliminate the hazard of the old style wood shingle roof.

Pure iron is durable and when a coating of zinc has been applied at the mill is still more so. Even galvanized iron sheets will present a more attractive appearance when painted, especially when it is desired to have a uniform color scheme for all parts of the plant.

Paint, however, will not adhere to zinc metal or to galvanized sheets of iron. After drying the paint will peel off. This difficulty can be overcome to some extent by swabbing the surface first with acetic acid or vinegar; but the zinc compound remaining on the surface has a tendency to deprive the paint oil of its elasticity; and a special treatment of the galvanized sheets has been devised by research chemists whereby the sheets are given a very finely crystallized phosphate coating that is neutral to paint.

In the engravings herewith are shown a sheet of ordinary galvanized iron which needs etch-



Photomicrograph of Armco Galvanized Paint-grip sheet enlarged 40 diameters

ing or weathering before painting, and a sheet of the phosphate coated galvanized iron.

The granular surface of the treated sheet keeps the paint from direct contact with the zinc and takes the paint easily from the brush and holds it when dry. The neutral phosphate contributes to the durability of the paint. These sheets can be soldered in the usual way, using regular muriatic acid as a flux, and can be arc or gas welded as ordinary galvanized iron.

The treated sheets can be painted immediately, saving the expense of a subsequent trip to the job. For this new product the American Rolling Mill Co. has chosen the name Armco Galvanized Paintgrip.

Germany Reduces Grain Import Duties

A shortage of grains and feedstuffs in Germany has led to sharp reductions in German import duties on wheat, rye, spelt, barley and oats for the period Jan. 1 to Aug. 31, this year, the U. S. department of agriculture has been informed. The quantity of imports will continue to be regulated strictly.

Import duty on wheat is reduced from 383.25 cents a bu. to 10.95 cents; on rye, from 204.4c to 10.22c; on spelt, from 383.25c to 10.95c; on barley, from 175.2c to 8.76c, and on oats from 93.44c to 5.84c. All prices were figured at the current rate of exchange.

Canadian Wheat Board Holdings

The Dominion Wheat Board on Jan. 2 issued its report for the crop year, 1935-36, by Jas. R. Murray, chief commissioner.

The report refers back to the appointment of the old Board Aug. 1, 1935, under John I. McFarland, and the operations of the new Board headed by Mr. Murray, from Dec. 3, 1935.

The Board took over 205,186,980 bus. of accumulated wheat from the old Board which had previously taken it over from the Canadian Co-Operative Wheat Producers, Ltd. This, together with the 1935 deliveries, made up the total receipts of 343,349,538 taken by the Board up to July 31, 1936.

Records of the Board showed producers delivered about 150,750,000 bus. of the 1935 crop to the Board and received the fixed price set by the Board in September, 1935. Total deliveries of wheat in the 1935-36 season amounted to 216,000,000 bus. so that the Board took delivery of approximately 70 per cent of the marketing by growers.

On July 31 last, the wheat held by the Board was made up of about 2,000,000 bus. of the 1935 crop and the balance of approximately 82,000,000 bus. was old surplus accumulated between 1930 and 1935 which had not been sold.

The approximately 2,000,000 bus. of the 1936 crop was disposed of by November, 1936, but it is not disclosed how much of the 82,000,000 bus. of the 1930-35 old surplus still was held.

The Board's report said "the final accounts of the Board show a loss of \$11,858,104.18 on the 1935 crop." Expenses of the Board chargeable to the 1935 crop up to Nov. 21, 1936, totaled \$5,675,690.57 and amounted to 3.765 cents a bushel on the 150,740,226 bus. handled.

Expenses of the Board chargeable against the old wheat acquired from the Canadian Co-Operative Wheat Producers, Ltd., thru the McFarland Board covering the period Dec. 2, 1935, to July 31, 1936, amounted to \$4,922,558.58.

As the prices realized by the Board (on the 1935 crop) were less than the fixed prices which had in the first instance been paid to producers, there is no distribution to be made on the certificates issued to producers at the time they made delivery of wheat to the Board.

Thus ends another sad chapter of government's sad experiment in marketing grain.

Washington, D. C.—Commissioner William A. Ayres succeeded to the chairmanship of the Federal Trade Commission for 1937.

Industrial Corn Situation

By F. G. COE, Chicago, Ill., before Grain Market Analysts Club.

Price Levels.—Almost everyone, including apparently about 95% of the grain trade, seems to jump to the conclusion that a short crop of grain means a high price and, the shorter the crop the higher the price. History teaches nothing of the kind. The trouble is that the supply of any certain grain is a known quantity. The demand is rather a nebulous, uncertain thing to most of us. We think that because the average crop is 2,700,000,000 or 2,800,000,000 and that over a period of years we have successive crops of about that size it is all consumed, or nearly so, that there is a definite, almost unvarying demand for corn. Therefore, when the crop drops to 2,000,000,000 as it did in 1930, the prophets, the market-letter writers, and others immediately match those yields against a normal demand and predict dire scarcity. They did it in 1930 and were wrong. They did it again in 1934 and again were wrong. They did it on the first short oats crop of 1933, and had it figured out beyond the peradventure of a doubt that there simply would not be any oats left in the country by the following February or March and yet, on July 1, 1934, there was actually a considerable carry-over of oats.

Some of you may remember that in 1931 one of our prominent speculators ran what looked like a "corner" in July corn and got 8,500,000 bushels delivered to him. In spite of the crop of only 2,000,000,000 bushels the year before, he could not find buyers for his 8,500,000 in September.

The fact is that the demand is really as variable as the supply. When the damage is being done to the crop like it was last July and August, speculation anticipates disaster and the price runs way up at that time. When the worst is known, and the actual size of the crop is determined, this fever dies down and the speculator tries to sell out and generally no one is very much interested by that time in buying it from him. Prices sagged off all through the winter of 1930 and spring of 1931. While prices did go a little higher in December 1934 than they were the preceding August, due to the fact that the truckers took the movement in every direction to the feeders in the corn belt, instead of the corn coming to the terminal markets, yet after December the market slowly declined again. Many things account for the lack of demand in a short-crop year, among them in this instance the selling off of millions of head of livestock, especially hogs.

The industrial demand for any grain falls off when the price of the finished product gets even slightly above the general price level. Substitution immediately becomes wide-spread. At present there are large quantities of foreign tapioca-starch, vegetable oils, feed-stuffs, and many other things coming in over the tariff wall and taking the place of some of our products. Argentine corn is coming in at Atlantic, Gulf, and Pacific ports and penetrating further and further inland from the coast, thereby bottling up in the mid-west corn belt such supplies as are still on the farms and in terminal elevators. Farmers are naturally using all kinds of roughage and other feed-stuffs in place of the normal amount of corn which they usually feed.

Supplies.—Comparing the present supply of corn with the last short-crop of 1934, we find farm reserves Oct. 1, 1936, of 174,000,000, instead of 267,000,000 the same date two years ago. The visible supply was about 3,000,000 instead of 60,000,000 in 1934. Our crop this year is now reported at 1,526,000,000 versus 1,478,000,000 in 1934. This gives us a total in all positions as of October 1st this year of 1,703,000,000 or 102,000,000 less than two years ago when we had 1,805,000,000 in

sight. This is about 5½% less corn than in the previous short-crop year. But at the same time we had 260,000,000 bus more oats on the farms in October than we had at the same date in 1934. The combined supplies of corn and oats at about 2,750,000,000 are about 400,000,000 bushels more than the total disappearance of those two grains for the year commencing in 1934. It may be reasonably expected that with corn so high in price this year and oats relatively cheap, oats will be substituted on the farms wherever it is possible. The highest price of any corn future during the 1934-35 crop season was 97c for December corn on Dec. 7, 1934. December corn sold this week at \$1.10¾, or 13¾c higher. Ignoring the oats supply and feed stuffs other than corn, we already see a price 15% higher than two years ago to offset a corn supply 5½% smaller. May we not reasonably ask ourselves, therefore, whether history is not repeating itself and that again the high price on this short crop may be made this month as it was before?

From the feeding angle, it is admitted that while the relationship between corn and hogs right in this territory is not unprofitable, we must remember that in Western Iowa, Missouri, Kansas, and Nebraska feeders are paying 12c and 15c a bushel over Chicago prices for their corn or from \$1.15 to \$1.20 for new corn right now with hogs selling out there at about \$10 per cwt., which of course is a very unprofitable operation. Conservative people in Kansas and Nebraska advise us that large numbers of farmers are running off their hogs just as soon as they can get them even decently ready for market. This means that the western demand for corn which we have seen in the last few weeks will gradually subside throughout the Winter.

Accurate Sampling Prerequisite to True Grading

By AXEL C. AHLMAN, Acting Chief Grain Inspector, Chicago, Ill.

The value of the inspection certificate depends upon how accurately the sampling of the grain has been performed, the ability of an inspector to grade the grain may be ever so good, but if the sample on which the grade of the grain is to be based does not fully represent the lot from which the sample has been obtained, the grade as applied will not reflect the real quality and value of the grain.

The essential and material elements of correct grain inspection are uniformity and accuracy in the sampling and grading of the grain. One great difficulty the grain samplers have to contend with is when the car is so heavily loaded that the space between the top of the grain and the roof of the car does not allow room for the sampler to get the grain probe into the body of the load. Under such loading conditions, it is impossible to obtain a representative sample of the lot contained in the car, and results in obtaining only a door probe sample, or a shallow probe sample. A grade placed on such car lot must be made subject to re-inspection at unloading point which complicates sales procedure and unsatisfactory returns.

A shipper who is interested in securing the proper grade on his grain shipments coupled with the best price obtainable on such grade should endeavor to load his car so as to allow 24 inch space between the top of the load and ceiling of car, with such loading there will be no difficulty in obtaining a true average sample of the car, and the shipper will benefit in receiving the grade to which the grain is entitled.

Washington, D. C.—Rains and mild weather during December developed pastures and saved many farmers from feed prices that would have been much higher had cold weather made pasturing impossible, said the Department of Agriculture.

Improvement in Grade Standards

In his annual report Sec'y of Agriculture Wallace states that "Research and experimentation in the Department steadily improved the standards and the methods of applying them. Methods, instruments, and other apparatus were adapted to specific ends. Many public-service patents have been obtained for apparatus designed especially for grain standardization and inspection, and for other agricultural commodities.

"This year saw the conclusion of an exhaustive practical test of a new grain-sieving device known as the federal dockage tester, the making of new conversion charts for use with electric meters in determining the moisture content of Argentine flint corn and several other grains, and an improved refractometric method for determining the oil content of flaxseed. This method requires only a half hour instead of the 16 to 24 hours formerly required. In commodity grading much still remains subject to human judgment and skill, particularly in regard to such factors as flavor, body, and color in butter. But accurate measurements, through mechanical or chemical means, are steadily replacing the earlier empirical knowledge and ways.

These techniques are the results of laboratory and economic research supplemented by practical observation. The studies are frequently intricate but the resulting tests must be simple and practical. As a general rule, the standards reflect the normal spreads in the market value of a commodity. The steps between grades correlate fairly closely with the price differentials that prevail in the market. Research is providing more precise measures of the price significance of separate quality factors. Some quality factors that affect prices, however, may not yield to statistical measurements, and it is necessary then to rely on observation and judgment.

The relationship between the grades and market price differentials does not remain constant necessarily. Price spreads between grades of a product frequently reflect the proportions of the product that fall within each of the grades. There are other influences. Buyers' opinions as to value do not always correspond to intrinsic value. Before the federal standards were adopted, for instance, "pea-green color" was the quality factor in alfalfa hay that commanded a premium. Research disclosed that the feed value of alfalfa hay correlates more closely with its leafiness. Then the factor of leafiness was given greater emphasis in the standards. Steadily increasing premiums paid for leafy as compared with pea-green alfalfa apparently reflect the influence of the revised standards. Present studies give special consideration to the carotene or provitamin content of hay.

Federal Trade Commission Asks More Power

In its annual report the Federal Trade Commission on Dec. 14 asked the Congress for broader powers to fight unethical business practices.

The Commission recommended that the Act specifically provide that court review of the Commission's orders may be obtained by the Commission without the necessity for first proving its order had been violated "and that upon affirmance the court shall issue its own decree commanding obedience to the Commission's order."

It was further recommended that authority be provided to make the Commission's orders final and conclusive and violations of them punishable as contempt of court if a respondent fails to apply for court review within sixty days after the order is issued.

Of the 161 cease and desist orders issued during the year, fifteen were carried to United States Circuit Courts of Appeals for review

and in all of them the Commission's orders were upheld.

Next year the Commission may ask that it be made a court of last resort and be given authority to shoot at sunrise offenders who ignore its snoopers.

Windfall Tax Upheld by One Court

Judge Robert C. Baltzell of the federal district court at Indianapolis Dec. 10 upheld the windfall tax on processors in the suit brought by Kingan & Co., packers, and 90 other Indiana processors. The tax was ordered to be held in escrow by the court. An appeal will be taken. Judge Baltzell said:

"The complainant had a perfect right to pay the taxes levied under the A.A.A. and to contest its validity, but if it collected from others the amount of such taxes and retained the amount so collected, it then had an income from an entirely different source than that derived from the conduct of its ordinary business, and entirely different from the other processors who paid the tax and were not reimbursed.

"The act in question seeks to levy and collect a tax on this income and it applies equally to all persons in that class. The amount of money thus collected and retained cannot be said to be such as to which a person ordinarily would be entitled to receive in the conduct of his business. In other words, it is in excess of the usual amount received by him in the conduct of such business when the same volume is considered, and as such congress had the power to place in a separate class all persons having such an income and to enact legislation imposing a tax thereon."

Grain Trade News

[Continued from page 33]

Milwaukee, Wis.—The rate of interest for January has been determined by the finance committee of the Milwaukee Grain & Stock Exchange at 5%.

William L. Ingles, federal grain supervisor at Milwaukee for several years past, has been transferred to Chicago to become a member of the Board of Review and is succeeded here by Mort Johnson, who comes from the Minneapolis market.

WYOMING

Douglas, Wyo.—The Grain & Storage Co. was one of six business houses here entered by thieves, during the night of Dec. 24, who stole \$33 from the safe.

Clearmont, Wyo.—The elevator of the Sheridan Flour Mill was broken into during the night of Dec. 14, the thieves knocking the lock from the door to gain entrance. The loot consisted of 1,000 pounds of flour.

The United States bought 25,500,000 bus. of Canadian wheat between Aug. 1 and Dec. 19, according to official returns.

Sayreville, N. J.—R. C. Hodges, electrical engineer for the Titanium Pigment Co., recently made load tests on 800 motors in 40 of his company's departments. About 90% of the tests were made without breaking circuits; yet only simple testing equipment was used two ammeters, a voltmeter, a volt-ammeter, a recording ammeter, and two current transformers.

Status of merchandising transactions under the Robinson-Patman Act can be determined by the following five tests, suggested by Eric Canman, former pres. of the National Ass'n of Cost Accountants: "There must be a discrimination in price; this discrimination must be on products of like grade or quality; the discrimination must be between persons in competition with each other; interstate commerce must enter into the transaction, and the transaction must have an injurious effect upon competition."

Retail Report on Feed and Grain Dealers

Out of 200 feed, grain, fuel and lumber concerns reporting on their 1935 business to Dun & Bradstreet's research and statistical department, 117 reported a profit. Aggregate net sales for all reporting concerns was \$19,183,200, but the aggregate for the 117 profitable concerns alone totaled \$12,494,300. The average net sales for all reporting concerns was \$70,000, but the average net sales for the profitable concerns was \$85,000.

The average gross margin for all concerns was 15.4%, while for the profitable concerns it was 16.3%. The realized mark-up (per cent of cost) enjoyed by all concerns was 18.2%, against 19.5% for the profitable concerns. Little difference showed in the inventory turnover, the average for all concerns being 8.8 times per year, the average for the profitable concerns, 8.5 times.

Analysis of the 1935 operations of 238 feed, grain and hay concerns showed 150 of them on the profit side of the ledger. Aggregate net sales for all concerns were \$19,959,800, but the aggregate for the 150 profitable concerns accounted for \$15,164,500. The average net sales for the group was \$52,500, but for the profitable concerns it was \$65,400.

Quite sharp differences appeared in the merchandise ratios of the average of all feed, grain and hay concerns and the average for the profitable concerns. A gross margin of 13.4% and a realized mark-up of 15.5% showed for all concerns, but a gross margin of 14.5% and a realized mark-up of 17% showed for the profitable concerns. Inventory turnover for all concerns was 9.8 times per year, but inventory was turned 11.4 times annually by the profitable concerns.

Fifty-nine reported doing a cash business, and 37 of these were in the profit column. The remainder showed 40% of their sales to be on open credit.

All concerns reporting in the first group were in towns of under 20,000 population according to the 1930 census, and 80% of the concerns reporting in the second group fell in the same population range.

Costly Delays in Discharging Cargo

Shipowners rightly assume that shippers know or ought to know the conditions surrounding the unloading of cargo at destination, and have incorporated in the charter party specific provisions for the calculation and payment for time lost waiting to unload.

In the maritime strike on the Pacific Coast large sums are piling up in demurrage on boats tied up at the dock.

A steamer was chartered on the Zernocon form to load a full cargo of grain in the Black Sea in August, 1935, for Massowah on the Red Sea. The charter provided that the receivers would unload at their risk and expense at the average rate of 500 tons per day, Sundays and holidays excepted, that 15 running days on demurrage of \$200 per day would be allowed the shippers, but for additional time payment had to be made at 15% above the charter rate.

The steamer took on 9,266 tons, giving the charterers 18 days, 12 hours and 46 minutes. The boat arrived at Massowah at 5 p. m., Sept. 12, and notice of readiness to discharge was given at 8 a. m. next day. The discharge was not completed until Dec. 25. The owners' claim for 85 days' demurrage went to arbitration and was ultimately paid.

Judge W. H. Atwell at Dallas, Tex., denounced the windfall tax as unconstitutional, but refused the Pinckney Packing Co., of Amarillo an injunction restraining its collection, because he could not override the law against interference with collection of taxes.

Grain and Feed Trade News

Reports of new firms, changes, deaths and failures; new elevators, feed mills, improvements, fires, casualties and accidents are solicited.

ARKANSAS

Piggott, Ark.—The property of the Clay County Mill & Elevator Co. was damaged by fire of undetermined origin on Dec. 19.

Arkansas City, Ark.—Lloyd McEwen has bought the property formerly operated by John Probst under the name of the Missouri Pacific Feed & Elevator Co.

North Little Rock, Ark.—The Cameron Feed Mills, Inc., are installing a Kelly Duplex Vertical Feed Mixer. The machine is of one-ton capacity, with floor level feed and is motor driven.

CALIFORNIA

Corcoran, Cal.—Stock of the Cutter Grain & Milling Co. was damaged by fire caused by exposure, on Dec. 24.

Sacramento, Cal.—The property of the Wacker Feed & Fuel Co. was destroyed by fire of unknown origin at 9 p. m., Dec. 24.

Visalia, Cal.—The Visalia Milling Co.'s plant here burned Dec. 25 at 8 p. m.; loss, \$350,000. Incendiarism is suspected. The plant was owned by M. J. and Thomas Lally.

Los Angeles, Cal.—After all charges and normal Federal taxes, the Globe Grain & Milling Co. earned approximately \$240,000 for the six months ended Nov. 30 last, or the equivalent of \$1 per share on the 240,000 shares of common stock outstanding. This is a substantial gain over the corresponding period a year ago. For the fiscal year ended May 31 last, the company reported a net loss of \$120,088, after all charges and taxes, including special adjustments. Elimination of the processing taxes with the attendant invisible expenses has materially assisted in the improved status of operations, increasing profit earnings. The company has been steadily eliminating unprofitable properties. —M. N.

COLORADO

Grand Junction, Colo.—The elevator of the Grand Junction Seed Co. sustained damage by fire recently.

Fort Morgan, Colo.—The elevator of the Fort Morgan Mills, Inc., was damaged by fire of undetermined origin on Dec. 21.

Fountain, Colo.—Mr. Moser has sold the Moser Milling Co. to Bert Gilliland, who will continue to operate the mill under the old name.

Antonito, Colo.—The Antonito Flour Mill, that has not operated for several years, following a fire, is to be restored and operated by new owners, John B. and Nathan O. Yeakley, who own several mills in Texas.

ILLINOIS

Mt. Carmel, Ill.—The Bluff City Mills & Elevator Co. has redecorated the interior of its office.

Alexis, Ill.—We are installing a new truck lift in our elevator at Alexis.—Roberts & Pearson.

Peotone, Ill.—The elevator of H. O. Deininger was damaged by fire on Jan. 3; insurance was carried.

Biggsville, Ill.—A new feed warehouse and a new coal shed have been erected by the Biggsville Shippers Ass'n.

Nokomis, Ill.—Raymond Kettelkamp is the manager and owner of a new business here, operating as the Farmers Feed Co.

Allen (San Jose p. o.), Ill.—The Allen Farmer Elevator Co. has installed a new 20-ton Soweigh Scale, with a 9x34-foot platform.

Peoria, Ill.—The Farmers Grain Dealers Ass'n of Illinois will hold its annual convention at the Pere Marquette Hotel Feb. 23, 24 and 25.

Bement, Ill.—M. C. Camp, in the grain business here for a number of years and a member of an old, prominent Bement family, died Jan. 6.

Decatur, Ill.—Robt. I. Hunt, long a partner in Suffern, Hunt & Co., grain dealers, died at his home Jan. 9 of heart failure, age 71 years.

Decatur, Ill.—The Shellabarger Grain Products Co. gave a Christmas bonus to 100 employees, based on the time served during the last year.

Paris, Ill.—Two new boilers have been installed in the power house of the Illinois Cereal Mills, which operate an up-to-date corn milling unit.

Shelbyville, Ill.—We no longer handle grain for shipment by rail. Trucks pick up all the grain and hay from the farmers, paying more for it than we can pay if we ship.—J. G. Root & Co.

East St. Louis, Ill.—The Terminal Elevator here is now under lease to the Farmers National Grain Corp. Some time ago this elevator was operated by the Terminal Grain Co., of St. Louis.

Morris, Ill.—Edward R. Coleman, for many years in the Chicago office of the federal grain supervision and more recently a licensed inspector at this point, died suddenly of heart disease on Jan. 7.

Odell, Ill.—The Quaker Oats Co. has installed a 20-ton, 9x34-foot heavy duty Soweigh Motor Truck Scale at its local elevator, also a new heavy duty hopper scale of the same make.

Martinton, Ill.—Farmers' Grain Co. closed its 1936 year with results as follows: Grain handled 264,701 bu., merchandise sold \$7,108.64, gross gain \$8,327.36, expenses \$4,297.07, operating gain \$4,120.29.

Wing, Ill.—Kohler Bros. Grain Co., of Chatsworth, Ill., has leased the elevator in Wing (owned by farmers) which has been operated by the Hasenwinkle-Scholer Co. Kohler Bros. have retained Homer Gibb as manager.

Newman, Ill.—Henry Eversole, grain dealer, was found dead in his automobile, slumped over the steering wheel, a half block from his home, early in the evening of Dec. 18. It was believed he died of a sudden heart attack.

Grayville, Ill.—We have torn down the obsolete elevator that was located here and built a new one of about 15,000-bu. capacity. Have also started installation of new small feed and flour mill here.—E. H. Morris Elevator, Robert Morris.

Kirkland, Ill.—The firm of George W. Banks & Son, identified with the business life of Kirkland for many years, ceased operations Dec. 31. The elevator passed into the hands of an association of men from Galva, Ill. The new manager of the elevator is Luman Colton.

Rushville, Ill.—Charged with stealing 5½ bus. of clover seed from the elevator of Bader & Co. early in the morning of Dec. 19, Jesse Kinnamon and Harold Bryant were arrested the following day. Following his arrest, Bryant made a full confession, implicating Kinnamon.

Champaign, Ill.—Swift & Co., Chicago packers, have announced their intention of erecting a \$250,000 soybean crushing mill here. The soybean oil will be sent from the local factory to Swift's Chicago refinery, to be prepared for use in salad oil, shortening, margarine and other products.

Farmington, Ill.—E. E. Davis, one of Farmington's oldest business men, and who had operated the Buckley Elevator here for 39 years, was seized with a fatal heart attack as he got into his car to start home from a farm sale seven miles from Farmington, on Dec. 17. He had been under the care of a physician for some time.

Rock Island, Ill.—A plant having a floor space of 9,000 square feet has been leased by the new firm of Barry Bros., Inc., which will manufacture a new food for small pets. The chief ingredients will be cooked meat and cereals. F. J. Barry, of Des Moines, Ia., and G. F. Heise, of Marshalltown, Ia., are the principals in the new concern.

Pekin, Ill.—With the coming of spring, W. W. Dewey & Sons, Inc., who purchased an elevator here last summer, as previously reported, will install complete marine equipment for handling grain brought to the elevator by its own barge lines. Dewey & Sons also have elevators at Rock Island, Henry, Spring Lake and other points. The local elevator has a capacity of 80,000 bus.

Tuscola, Ill.—The Tuscola Co-op. Grain Co. on Dec. 15 paid its regular 6% dividend on all outstanding stock and a ½-cent per bu. patronage dividend on all grain settled for between Sept. 1, 1935, and Aug. 31, 1936, the last fiscal year. Last year the company had a net income of \$13,262, compared with \$9,663 the previous year. The company owns and operates three elevators, at this point, at Hayes and at Ficklin. Clark A. Fullerton is manager.

Fairbury, Ill.—Emil Keller, who, until a few years ago when his health began to fail, was manager of the east end elevator here (formerly owned by the late J. P. Shearer) for 25 years, died at his home Dec. 24, at the age of 75 years. Mr. Keller had also been manager of elevators at Strawn and at Melvin. He had made Fairbury his home for the last 50 years and was active in its civic and educational affairs, having served several terms on the city council as alderman, and being an original member of the township high school board of education.

With the convening of the Illinois General Assembly the Illinois Grain Dealers Ass'n proposes to have introduced a bill to define, regulate, license and tax itinerant merchants and the business conducted by them, to require for the public insurance protection from damage sustained as the result of the negligent operation of vehicles by itinerant merchants, and to require fidelity bonds. This bill represents the best efforts of those in the grain trade who are anxious to save the country grain buying business for the elevators. It is hoped that when it is introduced it will receive the active support of every member. We must if possible prevent the "itinerant merchant" or trucker peddler from demoralizing the grain industry as he has the coal industry.—W. E. Culbertson, sec'y Illinois Grain Dealers Ass'n.

CHICAGO NOTES

Harold C. Hanson became a general partner of Gerstenberg & Co. Jan. 2.

Board of Trade directors have fixed membership dues for 1937 at \$250, unchanged from 1936.

The rate of interest for advances on Bs/L has been set at 5% per annum during January by the directors of the Board of Trade.

STRATTON GRAIN CO.

MILWAUKEE, WIS.

CHICAGO, ILL.

ST. JOSEPH, MO.

NEW YORK, N. Y.

MILL FEEDS — FEED PRODUCTS — BY-PRODUCTS

Future Orders Solicited

Board of Trade memberships are selling for \$5,500, an increase of \$250 over the previous sale, and \$550 over the last sale of 1936.

William H. McDonald, well-known member of the Chicago Board of Trade and president of the Cash Grain Ass'n, has recovered from his recent attack of pneumonia and been released from the hospital.

Frank Sayles Tenney, for many years a member of the Board of Trade, died at his home in this city in the Surf Hotel on Dec. 27. Mr. Tenney came to Chicago in 1900 and engaged in the grain business, with offices on LaSalle St.

Paramount Cereal Co., incorporated; capital stock, 200 shares p. v. common; incorporators: L. C. Niemtus, R. W. Hanson, H. Hanson; to manufacture or process wheat, rice and other cereals into puffed products for breakfast foods.

New members of the Chicago Board of Trade include the following: Lewis K. Neff, of Paris, France; Edward B. Terrill, Covington, Ky.; William M. Portway and Nathaniel Simonson, New York City; Wesley M. Sears, Grays Lake, Ill.

The Chicago Chapter of the Grain Elvtr. Superintendents will hold a meeting on Jan. 19, in the Tropical Room of the Medinah Club at 6:15 p. m. William H. McDonald, pres. of the Chicago Cash Grain Ass'n, will be the guest speaker.

J. S. Bache & Co. have admitted three of their staff as partners: Charles T. Corey, Sam J. Smith and George Weiss. The two retiring partners, Joseph P. Griffin and Frank J. Murphy, will continue with the firm in an advisory capacity.

Chris Levaccare, assistant state superintendent of grain inspection from 1923 to 1929, died suddenly of heart disease at his home on Dec. 26, at the age of 60 years. Mr. Levaccare was born in Italy, but had resided in Chicago over 50 years.

John H. Edwards, assigned to the Milwaukee office of federal grain supervision in 1917 and two years later transferred to Chicago as a member of the re-organized board of review, will be retired Feb. 28, following his 70th birthday on Feb. 8.

After Jan. 19 all warehouse receipts will be marked "new" or "old" style in conformity with the change in rules for grading corn effective Jan. 20; and, as so marked will be tenderable on new or old style contracts on the Board of Trade.

A 9-piece band from the Board of Trade Post of the American Legion enlivened the last day of the year on 'Change, costumed as farm-hand, ex-convict, Mrs. Simpson and other characters. After the sample-bag throwing at the close, professional entertainers on an improvised stage rendered several numbers. Santa Claus and seven aids came on the floor with a truckload of presents for the boys in the pits.

The General Field Warehousing Corp. is a new concern incorporated in Illinois, with offices in the Field Bldg. Edmund W. Miller, former Iowa banker, is pres., and Thomas F. Ford, for many years an official of the Northern Trust Co., is vice-pres. The new corporation will create bonded warehouses in plants, elevators or other storage spaces of firms or individuals by leasing in such locations the space necessary to accommodate the owner's inventory which is to be warehoused.

Officers of the Chicago Board of Trade elected Jan. 4 are as follows: Pres., Kenneth S. Templeton; first vice-pres., Siebel C. Harris (advanced automatically from second vice-pres.); second vice-pres., Barnett Faroll; directors, Harry C. Schaack, John J. Bittel, John E. Brennan, Philip R. O'Brien, James E. Bennett, each being elected for a three-year term. Members of the com'te on arbitration (for two-year terms): James S. Schonberg, Philip A. Copenhaver, Frank Haines, Earle M. Combs, Jr., Raymond A. Gerstenberg.

Members of the Grain Market Analysts Club listened to a most entertaining talk Dec. 28 by Major H. G. L. Strange, director of the Searle Grain Co.'s research bureau. He said the law-makers in Canada ought to know something about the grain business, having had 16 investigations in 46 years. Going back to earliest recorded history he traced the inevitable cyclical recurrence of wars to raiding of too prosperous peoples by the envious, finding that great wars were always followed by false recovery and subsequent depression, with debasement of the currency.

The total number of bus. of grain sampled in transfer from private to public elevators in 1936 was 9,254,423; number of cars of soybeans sampled for appeal, 285; number of samples analyzed, 1,183; number of samples for germination tests, 97, by the Board of Trade grain sampling and seed inspection department.

Robert P. Boylan, president of the Board of Trade for the last two years, has ended a career of more than 20 years on the local board and gone to New York City to represent Clement. Curtis & Co. as floor partner on the New York Stock Exchange. Mr. Boylan, who is 45 years of age, has been connected with Board of Trade firms since he was 14.

The annual report of the weighing and custodian committee of the Board of Trade shows total of 135,524 cars weighed during 1936, including in store (all cars, all commodities) 88,596, and out of store (all cars, all commodities) 46,928. In 1935 a total of 111,692 cars were weighed. Grain weighed to and from boats: In store, by lake vessels and barges, 15,202,672 bus., and out of store, by lake vessels and barges, 22,962,705 bus., making a total of 38,165,377 bus., compared with 29,061,547 bus. in 1935. Grain weighed from trucks, in store, 5,916 trucks, compared with 6,292 trucks in 1935. Received cars (grain only) 3.81% arrived leaking at the unloading elevator.

The usual annual notices of storage rates for 1937 have been posted by the public warehousemen, Central Elvtr. Co., Edw. R. Bacon Grain Co., Cargill Grain Co. of Illinois, Chicago Grain Elvtr. Co., Norris Grain Elvtr. Co., Rosenbaum Bros., Inc., and Quincy Elvtr. Co. The rates are on all grain and flaxseed received in bulk and inspected in good condition, 1¼ cents per bu. for receiving and shipping and for the first ten days' storage or part thereof and 1/20 of 1 cent per bu. for each additional day's storage thereafter, so long as said grain and flaxseed shall remain in good condition. On grain damaged or liable to early damage as indicated by its inspection when received, the rates of storage shall be 2 cents per bu. for the first ten days or part thereof and ½ of 1 cent per bu. for each additional five days or part thereof.

INDIANA

Poneto, Ind.—Notice of the dissolution of the Poneto Grain Co. has been published.

Lebanon, Ind.—The Lebanon Grain Co. has installed a Blue Streak Corn Cutter and Grader.

Fairmount, Ind.—Fairmount Grain Co. recently added a No. 2 Sidney Fan Sheller to its equipment.

Rolling Prairie, Ind.—Preliminary notice of dissolution has been filed by the Rolling Prairie Lbr. & Grain Co.

Hartford City, Ind.—The Hoosier Grain & Supply Co. recently installed a new hammer mill in its elevator.

Linton, Ind.—The Linton Mill & Grain Co. has recently installed a one-ton Kelly Duplex Vertical Feed Mixer, which is motor driven.

Mulberry, Ind.—Paul Rodenbarger has been appointed field representative for the Mulberry Grain Co.'s elevator at this point and at Dayton, Ind.

Fortville, Ind.—William E. McBane, son of Baxter McBane, who has been operating the McCordsville Grain Co., died Dec. 19, from spinal meningitis.

Petersburg, Ind.—Geo. T. Frank, who for many years owned and operated the Star Flour Mill, left his entire estate to his widow and two children.—W. B. C.

Columbus, Ind.—Frank P. Ross, 72, who for many years owned and operated a grist mill and elevator in Wayne township, is dead after a long illness.—W. B. C.

Muncie, Ind.—E. E. Elliott, ex-pres. of the Indiana Grain Dealers Ass'n, recently suffered four fractured ribs and some bad cuts about the head in an automobile collision. His car was wrecked.

Hazleton, Ind.—Jos. A. Davidson, 65, owner and manager of an elevator for a number of years, died recently, following a stroke. He is survived by his widow and two children.—W. B. C.

Wanatah, Ind.—The Farmers Merc. Co. closed its 1936 business, under same manager as for years back, with following results: Sales \$149,-853.36, gross gain \$12,682.54, expenses \$6,444.27, operating gain \$6,238.27.

Hamlet, Ind.—The Hamlet Grain & Feed Co. has installed in its reconstructed feed mill, following the disastrous fire of Nov. 17 previously reported, a large 40-h.p. hammer mill, Sidney Crusher Drive and 1½-ton Sidney Kwik-Mix Feed Mixer.

Mt. Vernon, Ind.—Oral Erwin, for 13 years manager of the Farmers Elvtr. Co.'s elevator, has purchased all stock in the corporation and will operate the firm as an individual. The corporation has been in existence nearly 25 years.—W. B. C.

Columbia City, Ind.—Farmers Mill & Elvtr., incorporated; capital stock, 500 shares of \$100 par value; incorporators: J. J. Kyler, Byron Yohe, Charles Sattison, Olin E. Hartman, William F. Wilken, Calvin Shoemaker, J. A. De-Money, William H. Hamilton; to operate grain elevator and flour mill.

Swayzee, Ind.—G. H. Haines has sold his stock in the Swayzee Grain Co., which operates an 18,000-bu. elevator here, to W. D. Lavengood and wife, thus giving Mr. Lavengood controlling interest in the company. Mr. Haines was largely instrumental in the formation of the company, and Mr. Lavengood has been the manager from the start.

South Whitley, Ind.—About 160 grain, feed and hay dealers and their wives attended a social gathering here last month, the meeting being sponsored by the Northeastern Indiana Hay & Grain Dealers Ass'n. After partaking of a bountiful dinner, an address was given by J. F. Cox, of Washington, D. C., followed by a program of local talent.

INDIANAPOLIS LETTER

New members of the Indiana Grain Dealers Ass'n are the Rosedale Elvtr. Co., Rosedale; the Mecca Elvtr. Co., Mecca, and the Rex Grain & Milling Co., Buffalo, N. Y.

The Appellate Court has upheld the decision of the lower court that the farm bureau co-operative units must pay the gross income tax. The amount involved totals about \$110,000, which will now be turned over to the gross income tax division.

Indianapolis, Ind.—Winslow-Evans Grain Corp. (Board of Trade Bldg.), incorporated; capital stock, 400 shares of \$50 par value; incorporators: E. F. Winslow, W. R. Evans, W. L. Honeycutt; to do a general grain merchandising business.

Indianapolis, Ind.—Burroughs & Farr are installing a new Kelly Duplex Vertical Feed Mixer. The new machine has floor level feed, one-ton capacity, and is motor driven. It has a new type head drive, making the machine noiseless in operation.

The tax conference, called by Gov.-Elect Townsend, was held in this city Dec. 10-11, with a large representation of various groups of tax payers present. The Indiana Grain Dealers Ass'n was represented at this conference and it joined with practically all other state retail organizations in asking a horizontal reduction of the gross income tax from 1% to ¼% on retail sales. Immediately following this conference, Anderson Ketchum, sec'y of the State Board of Tax Commissioners, appointed representatives of various groups to analyze the requests for equalizations of the tax by various groups, and to make their recommendations in a separate report to the coming session of the State Legislature. The Indiana Grain Dealers Ass'n was honored with having a representative appointed on this com'te, in the person of Pres. G. A. Pritchard. He will represent the grain and milling interests on this com'te. —Fred K. Sale, sec'y Indiana Grain Dealers Ass'n.

RATS DRINK



RAT-CIDE

A rat poison especially effective for mill and grain warehouses where rats have lots to eat but little to drink.

Write for literature and prices.

THE WEEVIL-CIDE COMPANY
1408 W. 9TH ST. KANSAS CITY, MO.

Indianapolis, Ind.—In order to carry out the arrangements in the phenomenal form of entertainment for our banquet session, to be held in connection with our 36th annual convention, we found it necessary to move the dates of our meeting up one day, which will be Tuesday and Wednesday, Jan. 19 and 20, 1937.—Fred K. Sale, sec'y Indiana Grain Dealers Ass'n.

IOWA

Eldora, Ia.—The Eldora Grain Co. has painted the exterior of its buildings and redecorated the interior of its offices.

Richards, Ia.—The elevator roof of the Richards Elvtr. Co. has been resingled and general repairs made at the plant.

Marcus, Ia.—An overhead bin, hopper-bottomed, for oat hulls has been built at the elevator of the Farmers Elvtr. Co.

Bailey, Ia.—The elevator at this point has been sold and is being moved to a farm in Minnesota, near the state line.

Waterloo, Ia.—A third press was recently installed at the plant of the Soybean Processing Co. here, increasing the capacity 50%.

Lakota, Ia.—The feed plant of A. C. Schissel & Son was recently enlarged, a feed mixer and oat huller installed and the grinder overhauled.

Lytton, Ia.—The old corn cribs of the Farmers Elvtr. Co. have been taken down and the lumber used in the construction of new coal sheds.

Mt. Pleasant, Ia.—The A. D. Hayes Co., which operates elevators in a number of Iowa towns, gave its employes a bonus of 10% of their year's salary.

Goldfield, Ia.—Stockholders of the Goldfield Farmers Co-op. Elvtr. Co. have voted not to reorganize the company under the new co-operative law.

Riverside, Ia.—The Piper Grain & Milling Co. has purchased the old freight house here, has moved it to the Piper Co.'s location and will use it for storing grain.

Hughes (r. d. Eldora), Ia.—The elevator here, closed for several years now, once operated by the Farmers Co-op. Co., is being taken down. It was built 40 years ago by G. A. Lynk.

Knierim, Ia.—A larger truck scale will be installed by the Farmers Grain & Coal Co. During the past year trucks too heavy for the old scale have dropped thru on two occasions.

Clare, Ia.—One of its three elevators will be taken down by the Farmers Elvtr. Co. in the spring, and a new office building put up. Installation of a 20-ton scale is also contemplated.

Roberts (Otho p. o.), Ia.—The Farmers Elvtr. Co., which recently suffered a loss by fire, the cupola and top of the elevator being burned, has had the T. E. Ibberson Co. replace the damaged parts.

Curley, Ia.—Louis Chapman, an elevator employe, was critically injured Jan. 26 when his clothing caught in the elevator shaft. He suffered a broken arm, brain concussion and severe body lacerations.

George, Ia.—Jake Rietz has been appointed manager of the Farmers Elvtr. Co.'s elevator, succeeding J. A. Seward, who has taken a similar position at Serran, Ia., as reported in the Dec. 23 Journals.

Rake, Ia.—The feed house and coal shed of the Farmers Elvtr. Co. were badly damaged on Dec. 23, when a box car of a Rock Island train, which was derailed by a piece of coal on the track, hit both buildings.

Rutland, Ia.—W. Axelson, who has managed the Farmers Elvtr. Co.'s elevator here for the past 17 years, resigned his position effective Jan. 1, 1937. He will operate his own hatchery business at Humboldt, Ia. E. Kjeer, who has been assistant, will take over the managerial position.—Art Torkelson, with Lamson Bros. & Co.

Iowa City, Ia.—George Katzenmeyer, owner of the Katzenmeyer Bros. Feed Co. here, who recently announced his candidacy for mayor on the Democratic ticket, suffered a light stroke on Dec. 30, and was later reported as improving.—Art Torkelson.

Sioux City, Ia.—Russell Castello, of this city, is reported to have announced plans for the erection of a soybean processing mill here, to be known as the Central States Processing Mills, this year, the plant to process annually 150,000 bus. of soybeans.

Algona, Ia.—The elevator business operated under the name of E. R. Rising will hereafter be known as E. R. Rising & Son, Mr. Rising having taken his son into the business. Erection of a 15,000-bu. elevator, a new feed mill plant and a warehouse is scheduled for next spring.

Vincent, Ia.—Repair work on the elevator at this point belonging to the Farmers Terminal Elvtr. Co., of Omaha, has been completed. A new boot and new leg belt and cups were installed, also a new motor to drive the leg and another to drive the compressor. Van Ness Const. Co. did the work.

Sioux City, Ia.—George R. McKittrick, 75 years of age, who until three years ago was weighing inspector for the Sioux City Grain Exchange, died last month. He had been in the grain business practically all his life and had operated elevators in different cities.

Lincoln, Ia.—A fountain pen in the possession of one of three men picked up at Ft. Dodge recently by the police, led to their being questioned about the robbery committed several months ago at the elevator of the Farmers Elvtr. Co. The pen has been identified as the property of the bookkeeper and stenographer employed at the elevator at the time of the robbery.

Alton, Ia.—Contract to replace the fire loss the Farmers Co-op. Elvtr. & Lbr. Co. sustained on Nov. 19 was awarded the T. E. Ibberson Co. A 25,000-bu. elevator, fitted with Fairbanks Scales for receiving purposes, Richardson Automatic Scale for shipping and Carter Cleaner for cleaning grain, will be provided. A feed mill building fitted with a new attrition mill, the necessary leg and bin equipment, corn crackers and graders and a Strong-Scott Mixer will be installed. A large warehouse with a store building for sales purposes will be built, and a 10-bin coal shed will be a part of the new layout. Under the elevator, warehouse and feed mill, full basements will be provided, as well as under the office. A new office building will be erected, with complete heating plant, etc. All the buildings will be covered with galvanized iron. Materials have just been ordered for this work.

Remsen, Ia.—The Farmers Co-op. Elvtr. Co.'s new 20,000-bu. elevator, previously reported as under construction, replacing its fire loss of last July Fourth, was recently completed and put into operation by the T. E. Ibberson Co., who had the contract. It is fitted with a 20-ton Fairbanks Scale for receiving grain, a Richardson Automatic Scale for shipping, a Carter Cleaner and an oat huller. A complete feed mill building was erected, the equipment of which included an attrition mill, a Speed King Corn Cracker, a grader and a Strong-Scott Mixer, along with the necessary legs and other equipment for a feed mill. A large office building was erected, with built-in features. A store building for sales purposes and the receiving and handling of cream, eggs and farm produce, and for the sale of merchandise, was built. A warehouse was provided, in which an electric elevator, for service to the basement and various floors, was installed. A cold storage unit was installed in the basement of the warehouse. A full basement was provided under all of the buildings, the outsides of which were covered with galvanized iron. Fairbanks-Morse Motors were used thruout the plant for power.

KANSAS

Hutchinson, Kan.—The William Kelly Milling Co. sustained damage to its electrical equipment on Dec. 13 and 14.

Mound Ridge, Kan.—John P. Goertz has installed a new feed mixer, in his feed mill, having a larger capacity than the old one.

Hutchinson, Kan.—The partnership of Charles Colby and Ralph Russell in the Russell Grain Co., one of the older grain firms of this city, has been dissolved.

Atwood, Kan.—A new 8,000-bu. elevator on the Micek farm 15 miles from here burned Dec. 12, together with 2,000 bus. of wheat and 500 bus. of barley. A short circuit in a truck was blamed for the fire.

Topeka, Kan.—Mr. and Mrs. F. A. Derby have turned globe trotters. Their first objective is New Orleans, from there thru the Panama Canal to Chile, then by rail across the Andes and the Argentine to Buenos Aires, returning by way of New York.

Minneapolis, Kan.—The new elevator for the Farmers Elvtr. Co. is nearing completion. The building is up and covered with galvanized iron. Much of the machinery is installed and the new house will soon be ready for business. The Van Ness Const. Co. has the contract.

Wichita, Kan.—E. E. Kohlweh has been appointed executive sec'y of the Wichita Board of Trade, succeeding the late J. J. Mann. For the past eight years Mr. Kohlweh has been employed by the St. Louis Merchants Exchange as rate expert. He starts in on his new duties about Feb. 1.

KENTUCKY

Tracebranch, Ky.—Ed Gibson has installed a new corn crusher at his mill.

Louisville, Ky.—Fenley Hay & Grain Co., incorporated; capital stock, \$7,500; incorporators: John C. Fenley, Jr., G. Earle Green and Josh S. Green.—A. W. W.

Bardstown, Ky.—The Willett Distilling Co. has installed at its new distillery three elevators and other necessary equipment furnished by the Sidney Grain Mch. Co.

Lewisport, Ky.—The Lewisport Mill Co., a corporation, has been dissolved as of Feb. 1, 1937, and the Lewisport Mill Co. will continue its business as a partnership. Personnel and management will be the same.

MARYLAND

Chewsville, Md.—Chewsville Co-op. Ass'n recently installed a new corn sheller, supplied by the Duplex Mill & Mfg. Co.

Millington, Md.—J. E. Higman & Sons have recently completed the installation of a new Kelly Duplex Vertical Feed Mixer, of one-ton capacity.

MICHIGAN

Butternut, Mich.—The Butternut Elvtr. has bot a new truck.

Blissfield, Mich.—Blissfield Co-op. Exchange has bot a No. 2 Sidney Fan Sheller.

Laingsburg, Mich.—A new hammer mill has been installed in the Piatt Grist Mill.

Saginaw, Mich.—Farm Bureau Supply Store recently purchased a one-ton Sidney Vertical Mixer.

Bad Axe, Mich.—The Bad Axe Grain Co. sustained slight damage to its property by fire of unknown origin on Dec. 22.

Reed City, Mich.—The Kent Elvtr. Co. recently installed new 20-ton scales. It also remodeled its office, for the better display of merchandise.

Merrill, Mich.—The Wolohan Elvtr. Co. has completely motorized its local plant, replacing a diesel engine with a 50-h.p. motor. The company also installed a bean drier recently.

Reading, Mich.—Edgar B. Bailey, one of the leading citizens of this place and until very recently engaged in the grain, feed and wool business, died Dec. 19, at the age of 84 years.

Perrinton, Mich.—The office of the Perrinton Elvtr., owned by the Kennett brothers, Frank and Henry, of Alma, was badly damaged by fire at about 7 p. m., Dec. 15, believed to have been caused by the stove in the office. The fire was extinguished before it reached the main part of the elevator, but the office was ruined; loss, about \$2,000; insured.

J. H. Teasdale Commission Co.

Established 1848

Four Generations have shipped their grain to Teasdale. Almost a century of efficient grain service.

Consignments Solicited

Merchants Exchange St. Louis, Mo.

Michigan Headquarters

Elevator Equipment and Supplies

FLACK PENNELL CO.

Phone 25181 Saginaw, Mich.

Woodland, Mich.—The Farm Buro elevator was entered by burglars, during the night of Dec. 15, who blew off the safe door with nitroglycerine, smashing the office stove and damaging the furniture. The robbers secured \$684.

Hartford, Mich.—The Hartford Milling Co.'s mill, a pioneer in this community, will be reopened in the near future by the owner, A. Casteels. The mill is equipped for making flour, all kinds of feed and buckwheat, graham, rye and corn flours.

Ubyly, Mich.—Joseph Block plans to rebuild his elevator that burned recently, as reported in the Dec. 23 Journals, the new elevator to be larger than the old one and of modern construction. The safe, containing the records, was found to be intact and was removed from the ruins.

MINNESOTA

Gully, Minn.—The Swanson Feed Mill burned last month.

Benson, Minn.—The Lang Elvtr. Co. has installed a new Fairbanks Truck Scale.

Truman, Minn.—The Farmers Elvtr. Co. has added a small cleaner to its equipment.

Clarkfield, Minn.—The Farmers Elvtr. Co. has had new motors installed in the elevator.

Lindstrom, Minn.—An up-to-date crusher was recently installed by the Lindstrom Mill Co.

Canby, Minn.—A new truck lift was recently installed at the elevator of the Farmers Grain Co.

Appleton, Minn.—The Farmers Co-op. Elvtr. Co. has added an oat huller and a feed mixer to its equipment.

Rose Creek, Minn.—The T. E. Ibberson Co. has just completed covering the Hunting Elvtr. Co.'s elevator with iron.

Hazel Run, Minn.—G. A. Diggins, manager of the Hazel Run Produce Co., installed a new truck lift recently at the elevator.

Lewiston, Minn.—The Lewiston Elvtr. Co. recently installed a new triple-action, one-ton feed mixer of the horizontal type.

Cottonwood, Minn.—The Farmers Co-op. Elvtr. Co. has improved its equipment by installing 20-ton scales in its driveway.

Magnolia, Minn.—Magnolia Farmers Elvtr. Co. recently installed a Kelly Duplex Vertical Feed Mixer of one-ton capacity, and equipped with motor drive.

Avoca, Minn.—The Farmers Elvtr. Co. has improved its equipment by the installation of a large Superior Grain Separator, purchased from R. R. Howell & Co.

Marshall, Minn.—A new mixer has been added to the equipment of the feed department of the Farmers Elvtr. & Milling Co., and general repairs made in the plant.

Granite Falls, Minn.—A cleaner was recently added to the equipment of the Jertson Elvtr. Co., and the erection of a new office is planned, the basement of which will be used as a garage.

Byron, Minn.—The Byron Elvtr. Co. has awarded a contract to the T. E. Ibberson Co. for rebuilding its elevator here. This will be a 25,000-bu. elevator, with all modern equipment.

Kerkhoven, Minn.—We expect to build and equip a complete feed manufacturing and mixing plant, also seed plant, building to start in the early spring.—Kerkhoven Farmers Elvtr. Co.

Dovray, Minn.—The Dovray Grain Co. is installing a new Kelly Duplex Vertical Feed Mixer, of one-ton capacity, which is noiseless in operation, has floor level feed and is motor driven.

Thief River Falls, Minn.—A building to house a feed grinding plant is to be erected here by the Land O' Lakes Creamery, to be of frame construction, 30x60 feet, and to cost approximately \$1,000.

Hutchinson, Minn.—The new unit to the Pacific Grain Co.'s elevator and feed mill here for the manufacture of feeds, reported in the Nov. 25 Journals as under construction, is equipped with a Jacobson Hammer Mill and a Strong-Scott Mixer. A number of bins were built. A two-story warehouse, with a full basement, and a store building for retail purposes were provided. The whole plant is covered with galvanized iron. The T. E. Ibberson Co. had the contract.

Fairmont, Minn.—The Golden Sun Milling Co., of Estherville, Ia., manufacturers of feeds, cereals and flour, has just opened a branch mill at this point, 72x32 feet, with a 12-foot driveway and a 10-ton scale, also a 6,000-bu. elevator. A four-bin coal shed will be built. The mill is operated by a 75-h.p. electric motor.

Glenwood, Minn.—The new 25,000-bu. elevator built for the Glenwood Farmers Elvtr. Co. by the T. E. Ibberson Co. (as reported in the Oct. 28 Journals), replacing a recent fire loss, is fitted with a 15-ton Fairbanks Scale, necessary legs and bins, and in addition to the elevator a new office building was provided, and a feed mill building, fitted with a Jacobson Hammer Mill and necessary bin equipment.

Canby, Minn.—The Western Grain Mer's Ass'n held its regular December meeting in this city, with Pres. Wollum presiding. A. F. Nelson, of Minneapolis, sec'y of the Minnesota Farmers Elvtr. Ass'n, was called upon to explain the legislative changes that his organization is seeking and said that some changes in laws were deemed advisable so that they would be more workable and also more just and equitable to grain men, on whom the entire burden of collection on mortgaged grain rests at present, and if he pays the wrong party, he is expected to make an additional payment to the right party. Discussion followed Mr. Nelson's remarks. By a rising vote the ass'n voted unanimously favoring a change in the expiration date for storage tickets from Aug. 31 to July 1.

Renville, Minn.—Fire recently damaged the elevator of the Farmers Elvtr. Co., which operates a concrete storage, which had a wooden cupola. The fire was reported in the Sept. 23 Journals. The T. E. Ibberson Co. was awarded the contract for replacing the top part of this building and used fireproof materials—steel and concrete—the work having just been completed. The company also awarded the contract to the Ibberson Co. for a complete new feed mill building and equipment, which is being built at this time. The equipment consists of a Strong-Scott Attrition Mill and Mixer, with necessary leg and bin equipment, also a large warehouse. Driveways to the mill are provided with Fairbanks Scales for receiving purposes and Fairbanks Dormant Scales are used in the mill. Full basements are provided under the buildings and the whole plant covered with galvanized iron.

Hutchinson, Minn.—The new feed mill and elevator for the Farm Service Stores, Inc., has been completed by the T. E. Ibberson Co. and the opening day was held Dec. 26. This plant consists of a 20,000-bu. elevator, seed cleaning unit and feed mill. Cleaners were provided, a 20-ton Fairbanks Scale for receiving purposes and Fairbanks Dormant and Hopper Scales. Motors used thruout this plant are GE and Fairbanks-Morse. A large store building, with a store front, having show windows and built-in features, and providing an office in the building, were a part of this work. Two warehouses were built for the storage of feeds. A 10-bin coal shed was built. In the feed mill, an attrition mill, with two 30-h.p. motors, was installed, also an oat huller and Speed King Cob Crusher. There is a basement under all of the buildings, all of which were covered with galvanized iron.

Winger, Minn.—The Farmers Co-op. Elvtr. Co. has placed an order with Jack Johnson of R. R. Howell & Co. for a new cylinder grain separator and a large seed cleaner, both machines motor driven.

Imogene, Minn.—The Van Ness Construction Co. has a contract for some repair work to be done on the Farmers Terminal Elvtr. Co. plant at this point. The annex, which is badly out of plumb, is to be pulled back and rodded to the elevator. A new Van Ness Roller Bearing Boot and a new boot pan are to be installed. Also the truck dump is to be moved ahead to care for longer trucks.

DULUTH LETTER

On Jan. 4, C. F. Macdonald was re-appointed sec'y of the Board of Trade and started his 31st year in that position.—F. G. C.

W. O. Torgerson, a member of the state board of grain appeals at Duluth, has been re-appointed to serve another three-year term, ending Aug. 1, 1939. The appointment was made by Governor Hjalmer Peterson just prior to termination of his term of office.—F. G. C.

W. R. McCarthy, traffic manager, and F. S. Keiser, traffic commissioner, of the Duluth Chamber of Commerce, were in Chicago recently, presenting arguments before a hearing of the Interstate Commerce Commission on grain rates. Duluth and Twin City grain dealers are named intervenors in the case which involves charges on bills of transit of south-west winter wheat to these markets.—F. G. C.

The Duluth Board of Trade Clearing Ass'n held its annual election Jan. 5. All officers and directors were re-elected. O. E. Martin is pres., J. W. Galvin vice-pres., Geo. F. Foster sec'y and manager, and S. W. Paine, assistant manager. Directors are: O. E. Martin, J. W. Galvin, H. J. Atwood, Geo. Barnum, F. E. Lindahl, H. S. Newell and G. H. Spencer. Annual election for officers, directors, board of arbitration and appeals of the Board of Trade will be held Jan. 19.—F. G. C.

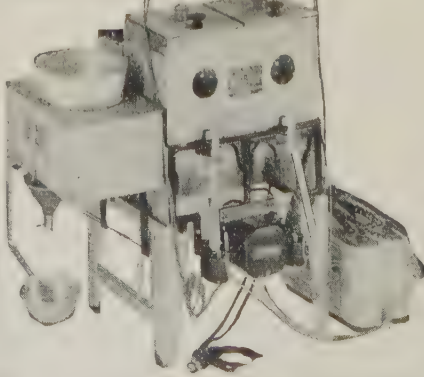
MINNEAPOLIS LETTER

Again the broadcast hours of the Minneapolis grain market over station WCCO have been changed, effective Jan. 4. The new hours are 10 and 11 a. m. and noon, except Saturdays, when the noon broadcast is omitted, with the closing quotations daily at 2 p. m., except Saturdays, when they will be given at 12:35 p. m.

C. N. Barrett, who has been engaged in feed manufacturing and jobbing in this market for 17 years, having been manager of the feed division of Northrup, King & Co. most of that time, resigned from that company recently to become associated with the National Oil Products Co., of Harrison, N. J., in that company's Chicago office.

The G. A. Haertel Feed & Seed Co. awarded the contract to the T. E. Ibberson Co. for the erection of an addition to its feed mill here. New equipment consists of a Speed King Cracker and a roll mill, a Pynch Vertical Mixer, a Jacobson Hammer Mill and cleaners, with necessary leg equipment. Fairbanks-Morse Motors were used for power. The work is being completed at this time.

Showing two-compartment size Brown-Duval Moisture Tester equipped with Electric Automatic Shut-off Device.



Are You Prepared

FOR THE

CORN MOVEMENT

with

SEEDBUREAU QUALITY

GRAIN TESTING EQUIPMENT

Catalog on request

PROMPT SHIPMENT

SEED TRADE REPORTING BUREAU

TEL. WABASH 3712

223 W. JACKSON BLVD.

CHICAGO, ILL.

John S. Mack, 77 years of age, superintendent of the Atlantic Elvtr. Co.'s elevator for 39 years, died Dec. 20.

New members of the Minneapolis Chamber of Commerce include Burton H. Hales, of the Hales & Hunter Co., Chicago.

MISSOURI

Princeton, Mo.—The elevator here owned by Joe Coon burned Jan. 7. Loss, estimated at \$3,500.

Forest City, Mo.—The Farmers Elvtr. Co. has added a one-ton Kelly Duplex Vertical Feed Mixer to its feed mill equipment.

Valley Park, Mo.—Valley Park Co-op. Elvtr. Ass'n closed 1936 as follows: Sales \$93,953, gross gain \$12,527, expenses \$8,163, operating gain \$4,364, paid 6% dividend on \$28,000 stock out.

KANSAS CITY LETTER

Harry Robinson, of the Robinson Elvtr. Co., and his wife are visiting in Australia.

George W. Hoyland, Inc., has started the new year with a new address, having moved to the eighth floor of the Board of Trade Bldg. from the New England Bldg.

Celsus P. Moss, retired grain dealer and banker, died Dec. 10 at St. Luke's Hospital, at the age of 67 years. He was active in church and fraternal circles, also in politics some years ago.

The futures department of the E. H. Sullivan Grain Co. has been put in charge of R. W. Sampson, who has been in the grain business here a number of years, having been a pit broker and a member of the Board of Trade.

New officers of the Kansas City Hay Dealers are as follows: Pres., R. A. Huffine; first vice-pres., N. C. Campbell; second vice-pres., John Hall; directors: F. W. Taylor, W. C. Brown, W. G. Zimmerman. Arbitration com'te: L. E. Eades, L. H. LaForge, R. H. Tyler.

Two important southwestern regional grain co-op. marketing agencies have refused to participate in the refinancing plans of the Farmers National Grain Corp. and have severed their business relations with the government-financed agency. They are the Farmers Union Jobbing Ass'n and the Equity Union Grain Co., having headquarters in Kansas City and operating in Kansas, Nebraska and Colorado. These two organizations, a few weeks ago, at a joint session at Wakeeney, Kan., moved to establish a joint sales agency on the Kansas City Board of Trade. Together they have a membership of 315 local co-op. marketing units handling approximately 25,000,000 bus. of grain yearly.

The Moore-Seaver Grain Co., formed as a partnership of B. C. Moore and J. E. Seaver (both of whom are now deceased) 31 years ago, has been dissolved and the assets distributed among the stockholders. On the death of her husband in 1929, Mrs. B. C. Moore assumed the presidency of the firm, which she retained until the present. H. C. Gamage, vice-pres. of the Moore-Seaver Grain Co., has organized an entirely new grain company, of which he is the sole owner, and which will operate under the firm name of Moore-Seaver Grain Co., effective Jan. 1. R. A. Jeanneret, sec'y-treas. of the old Moore-Seaver Grain Co., has made application to the Kansas City Board of Trade to have his representation changed from the firm to himself as an individual.

Kansas City, Kan.—Bids on the machinery contract on the public levee elevator here were received on Dec. 17. The low bid was submitted by the Nicholson Co., Inc., at \$423,975. All other bids were rejected and the bid of the Nicholson Co. is being held pending approval by the P. W. A. and the authorization of additional funds to cover the cost of the project. In the meantime, the first contract awarded to the Morrison-Glasscock-Connor Co. for foundation work has been completed. All of the concrete slab foundations for workhouse and storage units have been placed; workhouse foundation walls and drawform walls up to the gallery floor, 104 feet high, are completed. Foundation walls for storage unit "A" are completed and drawforms on that section of the work started up Jan. 4. Other work on the public levee in connection with the project, the hydraulic fill for raising and grading the land, the steel sheet pile mooring dock and the foundations for river gallery piers is being pushed rapidly. The grain elevator will be ready for operation June 1, 1937. Horner & Wyatt are the designers and engineers.

The new directors of the Grain Clearing Co. of the Kansas City Board of Trade on Jan. 8 selected the following officers: Pres., Frank Theis; first vice-pres., Harry J. Smith; second vice-pres., Paul D. Bartlett; sec'y and treas., J. K. Christopher. George Guy Lee was re-appointed manager for the thirty-third consecutive year, and R. D. Cline assistant manager.

New officers of the Kansas City Board of Trade, elected Jan. 5, are as follows: Pres., D. C. Bishop; first vice-pres., E. C. Emmons (by succession); second vice-pres., E. C. Meserve; directors: G. F. Hiltz, R. M. Pease, R. H. Sturtevant, John Stark, E. E. Klecan, J. H. Martin. Arbitration com'te: R. A. Larson, S. G. Cronin, Edmund Marshall, L. J. Byrne, W. M. Neil. The new directors of the Grain Clearing Co. are as follows: F. A. Theis, Paul D. Bartlett, J. K. Christopher, E. E. Klecan, L. A. Fuller.

ST. LOUIS LETTER

St. Louis, Mo.—Class "B" and class "C" memberships in the St. Louis Merchants Exchange were abolished by vote of the membership recently, effective Jan. 1, 1937.

New officers of the St. Louis Grain Club, recently elected, were as follows: Pres., Bert Collins; vice-pres., Maurice T. Scott; sec'y-treas., Wilbur B. Christian. Directors: Paul F. Lynch, N. P. Nelson, J. Schurman, H. H. Savage and William F. Ohlemeyer.

Fred W. Worstell, weighing supervisor for the Merchants Exchange for 28 years, died Dec. 18, at his home in this city, from a heart ailment. He was 80 years of age. He had been associated with grain elevators for more than 60 years in St. Louis and East St. Louis, retiring only two years ago, after having been prostrated by heat.

The nominating com'te of the St. Louis Merchants Exchange has named the following officers and directors to be voted on Jan. 13: For pres., P. C. Knowlton (present first vice-pres.); first vice-pres., Robert F. Imbs and T. M. Scott. Directors nominated are: E. C. Seele, Stanley W. Dreyer, Bert Collins, H. J. Zastrow, Henry Heinrichsmeyer. Nominees for com'te on arbitration: H. S. Altmansberger, A. W. Lipsey, J. M. Cook, O. H. A. Kilz and F. K. Williamson. For com'te on appeals: W. A. Brown, L. M. Dexter, E. A. Schwartz, J. H. Albrecht and Julius Schuerman.

MONTANA

Bozeman, Mont.—Fire of undetermined cause originating in the pit slightly damaged the elevator of the Montana Flour Mills Co. on Dec. 25.

Hinsdale, Mont.—Frederick B. Gillette, a prominent citizen of this place and who was manager of the Imperial Elvtr. Co.'s elevator for several years, died Christmas night, after an illness of about three months.

Malta, Mont.—Walter Schelgren, of Great Falls, has been appointed manager of the St. Anthony & Dakota Elvtr. Co.'s local elevator, succeeding Norman Storbeck, who was recently elected to a county office. Mr. Schelgren has moved his family to Malta.

Fort Benton, Mont.—The Farmers Elvtr. & Trading Co. sustained wind damage on Dec. 12.

NEBRASKA

David City, Neb.—G. E. Stepanek, proprietor of the Stepanek Grain Co., died at his home in this city Dec. 22.

Petersburg, Neb.—The elevators of the Crowell Elvtr. Co. and of the Petersburg Elvtr. Co. were recently broken into by thieves.

Beaver City, Neb.—Winfield T. Kelley, a member of the Edwards-Kelley Grain Co., of this city, died at his home, in December, from ptomaine poisoning. He was 55 years of age.

Fullerton, Neb.—The assets of the Fullerton Mill & Elvtr. Co. were sold by sealed bidding, during the last week of December. The sheds and scales were bot by the Cedar Valley Lbr. Co., and the corn crib by Carl Hess.

Hebron, Neb.—Guy Maple's grain elevator was entered by thieves during the night of Dec. 29, who pried open both the front and back doors, took \$11 in cash and approximately \$75 worth of commodities.—R. E. Harrington, with Geiger Grain Co.

Touhy, Neb.—The elevator of the Touhy Grain Co., Emil Ohnoutka owner, burned at 5 a. m., Dec. 22. The capacity of the frame elevator was 14,000 bus., but very little grain was in it at the time of the fire. The Touhy Grain Co. owns another elevator here.

Page, Neb.—The Farmers Union Co-op. Co.'s elevator was one of five local places to be visited by burglars during the night of Dec. 13, entrance being gained by prying open one of the office windows. The combination was knocked off the safe and about \$40 stolen, also a new portable typewriter.

Rockford, Neb.—The Van Ness Const. Co. has the contract for rebuilding the feed mill (which was recently burned) for the Rockford Grain Co. The new building will be 20x24 and will be covered with galvanized iron. A new No. 20 Blue Streak Grinder is being installed and a 20-h.p. motor. The plant is about completed now.

Omaha, Neb.—With the sudden death of William J. Hynes, Jr., from a heart attack, on Dec. 31, a brilliant career in the grain business was ended. Mr. Hynes, who was only 30 years of age, was the son of a former president of the Omaha Grain Exchange who died only four years ago, leaving his successful grain business to his son, who had been associated with him for several years. Shortly after his father's death young Hynes absorbed the Hynes Elvtr. Co. into the Farmers Terminal Elvtr. Co., of which he was president and practically sole owner. He dealt in grain in the Omaha market, operated two terminals in Omaha, one in Council Bluffs and a line of about 25 country elevators in Nebraska, Iowa and Minnesota.

NEW ENGLAND

Randolph, Mass.—The elevator of Frank Diauto was damaged by fire on Dec. 19.

Boston, Mass.—Applicants for membership in the Boston Grain & Flour Exchange include Ralph E. Parmenter, representing the Merrimac Farmers Exchange, Inc., Concord, N. H.

RANDOLPH GRAIN DRIERS

ASK THE MAN WHO HAS ONE
THAT'S ALL
WRITE FOR CATALOGUE

O. W. RANDOLPH COMPANY

3917-21 IMLAY ST., TOLEDO, O., U. S. A.

NEW JERSEY

Bridgeton, N. J.—On Dec. 15 the property of the Co-op. G. L. F. Holding Corp. was damaged by fire of undetermined origin.

NEW YORK

Camden, N. Y.—Wilson Walker, operator of the Garrow Feed Mill, is closing out his stock and retiring from the feed business.

Cobleskill, N. Y.—The machinery and stock of the Cobleskill Milling Co. were damaged by fire of undetermined origin on Dec. 25.

New York, N. Y.—New members of the Produce Exchange include James F. Reeves, of Cambridge, Mass., and Charles Slaughter.

New York, N. Y.—Henry George Schau, of Bloomfield, N. J., retired pres. of the International Grain Elevtr. Co., of this city, died at Miami, Fla., Dec. 24, after an illness of two years.

Bridgeport, N. Y.—Jefferson Downs, operator of a feed mill at this point for many years, died just before Christmas, at his home in Canastota, N. Y., after a short illness, at the age of 86 years.

Mexico, N. Y.—Following a stroke three weeks before, Thomas H. Young, 80 years of age, who operated a feed mill at this point for nearly 25 years until his retirement about a year ago, died at a hospital at Cortland, N. Y., recently.

Buffalo, N. Y.—Due to an increase in business the Vita-Vim Millers, feed manufacturers, have leased the Granger Bldg., giving the company 10,000 square feet additional space. After completion of alterations the new quarters will be occupied, probably about Feb. 1.

Clarence Center, N. Y.—Ebersole Milling Co. is installing a new Kelly Duplex Hammer Mill and Kelly Duplex Feed Mixer in its new plant, replacing the one recently destroyed by fire, as reported in the Dec. 9 Journals. Both machines are motor driven. The mixer is of one-ton capacity, with floor level feed.

Buffalo, N. Y.—Miss Nellie R. Thurston, who with her father originated grain trade statistics for the Port of Buffalo long before the Corn Exchange was in existence, died Dec. 21 at the age of 75 years. Her father was made sec'y of the old Buffalo Board of Trade, antecedent of the Corn Exchange, in 1863, his salary being fixed at \$1 a day, and Miss Thurston assisted him. She has been connected with the Chamber of Commerce since her father's death, which occurred in 1898.

Buffalo, N. Y.—E. E. McConnell, who two years ago organized the Rex Grain and Milling Co. and engaged in the manufacture of feeds, has sold his interest in that company to Mr. C. B. Weydman who will continue to operate the mill. The firm of McConnell & Weydman has been discontinued and is now being liquidated. Mr. McConnell, who has been in the grain commission and brokerage business at Buffalo for more than twenty years, will henceforth devote all of his time to the grain business with offices in the Chamber of Commerce Bldg. Mr. McConnell's many friends in the trade will be pleased to learn that he will continue to serve them as in the past.

NORTH DAKOTA

Dwight, N. D.—The Farmers Elevtr. Co. suffered damage by wind on Dec. 19.

Leeds, N. D.—The Farmers Co-op. Elevtr. Co.'s plant was damaged by wind last month.

Nash, N. D.—The Nash Grain & Trading Co. will be moved to Grafton, N. D., within the next three months, it is reported.

Irene, S. D.—The elevators of the Riley-Arneson Co. here and at Wakonda, S. D., have had new grain cleaning equipment installed.

Rolla, N. D.—The Great Western Grain Co. has taken down the annex to its local elevator and used the lumber for other purposes.

Ray, N. D.—Dennis O'Connell, manager of an elevator at this point, was killed in an auto accident recently. He was 60 years of age.

Beach, N. D.—While unloading baled hay for the Farmers Elevtr. Co. recently, John Alguire received a painful injury to one of his eyes.

Arthur, N. D.—The manager of the Farmers Elevtr. Co.'s elevator at this point, Alton Burgum, was married to Miss Grace Williams, of Fargo, on Dec. 26.

Grandin, N. D.—The Farmers Co-op. Elevtr. Co., whose house burned recently, as reported in the Dec. 23 Journals, plans to rebuild. Some of the grain in the burned structure was salvaged.

Grandin, N. D.—James Ferguson, who came to Grandin in 1889 and engaged in the grain business, which he followed for 27 years, died recently in Fargo, at the home of his daughter, death being due to heart trouble. Mr. Ferguson was 85 years of age.

Gladstone, N. D.—A Farmers Union Co-op. elevator and warehouse will be constructed here, the organization having secured a Resettlement Co-op. loan of \$15,300. The Hogenson Const. Co. has the contract for the elevator, which is to be completed by Apr. 1. The capacity will be 35,000 bus. The warehouse will be 16x30 feet.

Grand Forks, N. D.—A. J. Scott, of this city, has been appointed temporary manager of the State Mill & Elevtr. here, by William Langer, the new governor of North Dakota, Mr. Scott succeeding A. F. Bonzer, Jr., appointed by the preceding governor. J. C. Goll, grain buyer, was also dismissed by the new administration. The recent official audit of the State Mill & Elevtr. showed an operating loss of \$96,819 and a total loss of \$368,572, including depreciation and bond interest, for the fiscal year ending June 30, 1936.

Wahpeton, N. D.—The T. E. Ibberson Co. has completed a new building for the Matt Braun Feed Mill at this station. In addition to the feed mill building, a large warehouse was built. There are 17 bins in the feed mill for processing feeds. The equipment consists of an Ajax Oat Huller, 2,000-lb. Strong-Scott Batch Mixer, Corn Cracker and Grader and Attrition Mill, and the necessary leg equipment. Motor power was used thruout. The buildings were iron clad and full basement was provided thruout. The plant was put into operation the last week of December.

Williston, N. D.—The Farmers Union Co-op. Ass'n at this place recently lost its feed mill building and warehouse by fire, as reported in the Dec. 23 Journals, and immediately awarded the contract to the T. E. Ibberson Co. for replacement of same. The new building will be fitted with a Strong-Scott Attrition Mill, Mixer, Corn Crusher and Grader, and a Speed King Cob Crusher. There will be 12 bins for processing feeds, and a full basement will be provided. A 10-ton Fairbanks Scale will be installed in the driveway for receiving purposes, and Fairbanks Dormant and Hopper Scales will be used in the mill building. The whole building will be covered with galvanized iron. A large warehouse will be built and an office building. Materials have been ordered for this project.

Blismarck, N. D.—A new feed mill building, warehouses, seed processing plant and corn drying unit have just been completed for the Dakotah Seed Co. A store building was provided for retail purposes, having a store front and display windows, as well as an office, and special shelving and built-in features. The warehouses were provided with freight elevators, and in the feed mill cleaners and hullers for processing purposes were installed. The feed mill equipment was built into a building with necessary bins and leg equipment. A Strong-Scott Mixer, a Jacobson Hammer Mill, a Speed King Cob Crusher, and a grader for processing corn were installed. Special driveways were provided for bulking feeds. Basements were built under all of the buildings and the whole plant covered with galvanized iron. The Ibberson Co. had the contract.

Ayr, N. D.—The International Elevtr. Co. has just awarded contract to the T. E. Ibberson Co. for a large warehouse and store building to be built at Ayr. The store building will be fitted for retailing purposes, and the set of buildings will be covered with galvanized iron, and will be built adjoining the company's present elevator.

OHIO

Hillards, O.—Russell Grain Co. has recently installed a Sidney Electric Truck Dump.

Carey, O.—Theodore Bowlus has been appointed manager of the Carey Mill & Elevtr. Co. here.

Trebeins (Xenia p. o.), O.—C. O. Miller, proprietor of the Miami Valley Elevtr., sustained wind damage recently.

Delphos, O.—Machinery for the manufacture of scratch feeds and graded cut corn is being installed by the Garman Grain Co.

New Carlisle, O.—We plan to enlarge and install a complete new feed plant and seed cleaning equipment.—Studebaker Elevtrs.

Holgate, O.—The Holgate Grain & Supply Co. gave a noon broadcast over WHKC, Columbus, recently, of interest to local patrons.

Celina, O.—A load of seed was stolen recently from the elevator of the Palmer-Miller Grain Co., part of it being subsequently recovered.

Genoa, O.—Genoa Farmers Exchange Co. has recently installed a Kelly Duplex Ear Corn Crusher and Feeder ahead of its hammer mill.

Yellow Springs, O.—DeWine & Hanna have added a Kelly Duplex Vertical Batch Mixer and Molasses Agitator to their feed mill equipment.

East Monroe, O.—L. H. Simmons has retired from the firm of C. W. Thompson & Co., elevator operator here. The partnership has been dissolved and Mr. Thompson will continue the business, which was established over 11 years ago and has been managed by Mr. Simmons.

Columbus, O.—The Ohio unemployment insurance law has been passed and accepted by the Federal Social Security Board. The bill provides: (1) That Ohio employers subject to the 1% federal tax on 1936 payrolls will have nine-tenths of the tax canceled upon payment of an equal amount into the state employment compensation fund. The aggregate of payments thus saved to the state for 1936 is estimated at \$12,000,000. (2) That contributions will be assessed against Ohio employers at the rate of 1.8% of payrolls for 1937 and 2.7% a year from 1938 to 1941 inclusive. (3) That employers' contributions from 1942 on, under the automatic merit rating system, will range from 1% to 4½% of payrolls, according to the employers success in preventing layoffs.—W. W. Cummings, sec'y Ohio Grain, Mill & Feed Dealers Ass'n.

Cincinnati, O.—Elmer H. Heile was re-elected pres. of the Cincinnati Board of Trade at the organization meeting of the board of directors of that body on Dec. 30. Re-elected with Mr. Heile for 1937 were: W. J. O'Connell, first vice-pres.; Geo. A. Nieman, second vice-pres.; R. E. Rife, sec'y of the board of directors; Robert Lee Early, treasurer. The management of the Board of Trade was again placed under the direction of Schuh, Inc., with Don J. Schuh to serve in the capacity of executive secretary and manager. All employees of the board who are connected with the inspection and weighing department were voted 15% of the annual salaries as extra compensation for the year 1936. Pres. Elmer H. Heile had the unanimous backing of the board of directors in his recommendation that this be done. Mr. Heile stated: "Ours is not an organization for profit to its stockholders—dividends are not paid—and since we made some money last year I feel that the major portion of it should go to the employees whose duties were heavier during the year because of the increased business. We look forward to a good year during 1937 and for that reason the board of directors also authorized certain salary increases for next year."

ELLIS DRIERS

Known the world over for reliability and perfection of product. Direct Heat — Indirect Heat — And Steam Heat. Also . . .

A complete line of Rotary Driers and Feeders for mill and feed plants.

The Ellis Drier Co.

2444-56 N. Crawford Ave.

Chicago, Ill., U. S. A.

Official Brown-Duvel
MOISTURE TESTERS

and a complete line of grain and seed testing equipment. Every item guaranteed up to government specifications.

HARRY B. OLSON

ASHLAND BLOCK

CHICAGO, ILL.

Waynesville, O.—Farmers Exchange has made improvements with a large Ajax Hammer Mill, magnetic separator and ear corn crusher, all furnished by the Sidney Grain Mch. Co.

Columbus, O.—The retail sales tax has been re-enacted and includes the present coupon system, and the present brackets, for an indefinite period; the 3% tax on admissions for an indefinite period; the one cent a gallon liquid fuel tax for an additional two years; the use tax, supplementing the sales tax. Also there was re-enacted a bill authorizing school boards to issue notes against the anticipated receipts from the various school-supporting taxes.—W. W. Cummings, sec'y Ohio Grain, Mill & Feed Dealers Ass'n.

OKLAHOMA

Nash, Okla.—The elevator, office and stock of the Enid Terminal Elvtr. Co. were practically destroyed by fire of unknown cause on Dec. 24.

Oklahoma City, Okla.—Jennings Flour Mills Co., having a capital stock of \$5,000, has been formed here by Charles V. Jennings and associates.

Custer City, Okla.—The old elevator owned by the Farmers Co-op. Exchange has been taken down and on the site will be built a new 45,000-bu. elevator, of frame construction, with concrete foundation and floor. Hi Ames has the contract.

Nardin, Okla.—The remodeling work recently reported being done for the Nardin Co-Op. Ass'n is almost finished. Bins were built over the driveway and the cupola was raised ten feet. A new leg and distributor were installed and a 10-h.p. motor to drive the leg. The Van Ness Const. Co. had the contract.

PACIFIC NORTHWEST

Waitsburg, Wash.—Contract for a new structure has been let by the Atkinson Feed & Fuel Co., which sustained a fire loss recently.

Chewelah, Wash.—John P. Luttrell, 66 years old, Chewelah feed mill owner, was found dead on his own doorstep. A native of Missouri, he had lived in Washington since 1907.—F. K. H.

Portland, Ore.—The Harvest Milling Co., a new concern of which J. P. Haworth and Claude Cover are the principal stockholders, has just opened a plant here for a complete line of poultry and dairy feeds and pet stocks.

Spokane, Wash.—The Tri-State Warehousing Com'te favors continuation of the work already started to codify the laws of Oregon, Idaho and Washington, and is expected to recommend small appropriations in each state to do so.

Parker, Wash.—E. D. Clem has been named manager of the Kenworthy Grain & Milling Co. here, and John Maas has been advanced to the position of grain and hay buyer. H. D. Mulford, formerly with the company, has resigned.

Blackfoot, Ida.—The Blackfoot Farmers Milling Co.'s plant, including an elevator, was bid in by Carl Nelson, of this city, for the sum of \$6,423. The plant was sold to satisfy a judgment against it held by the Idaho Bank & Trust Co.

Spokane, Wash.—Sec'y Ron Kennedy, of the Pacific Northwest Grain Dealers Ass'n, has been in Boise, Ida., to contact the new administration in the Dept. of Agriculture (Commissioner Lee Johnson having resigned) with a view to continuing the progress already made toward proper warehouse legislation in that state.

Nampa, Ida.—E. E. Sanders has been appointed receiver for the Idaho Equity Exchange, after the Spokane Bank for Co-operatives filed a foreclosure suit seeking \$74,900, alleged to be unpaid on six loans made the exchange. Permission was granted by the court for the Equity Exchange to continue doing business at the elevator, mill and feed department.

Vancouver, Wash.—As the result of an agreement between grain exporters and a division of the International Longshoremen's Ass'n, the strike-bound wheels of commerce at the big grain elevator here turned again, on Dec. 28, the elevator resuming handling of wheat by rail, both into the elevator and out of it to other destinations. There was, however, no handling of grain from the elevator to ships, until the strike itself is settled. The agreement was said to apply to Portland, Seattle, Tacoma, Longview and Vancouver.

Auburn, Wash.—George Oravetz & Son., Inc., manufacturers of charcoal for feed, have almost completed their new \$15,000 grinding mill, replacing their fire loss of last November. The mill will have a capacity of 400 sacks per 8-hour day. In addition to the mill, the new plant will include a machine shop, a large storage warehouse and two storage sheds.

PENNSYLVANIA

Belfry (r. d. Morristown), Pa.—Joseph C. Blattner has installed an 80-bu. Sidney Kwik-Mix.

Glenville, Pa.—Codarus & Manheim Farmers Ass'n was the recent purchaser of a Sidney Kwik-Mix.

Parnassus, Pa.—A loss of more than \$20,000 was sustained by the Hamilton & Alter Feed Co. when its store here was damaged by fire during the night of Dec. 11, together with most of the feed and grain supplies on hand. Only a few hours before the fire three carloads of grain were added to the stock. Some insurance was carried. This feed company is one of the oldest in this section, and is owned by Howard Alter.

Philadelphia, Pa.—The following nominating com'te to name a president, vice-president and six directors to be voted on Jan. 26 at the annual election of the Commercial Exchange, has been appointed by L. G. Graff, pres. of the exchange: Joseph L. Carroll, Charles A. Devlin, Filson Graff, F. M. Hall and Monroe A. Smith. The com'te met on Jan. 4 to receive suggestions from members of the exchange as to their choice of nominees.

SOUTH DAKOTA

Canistota, S. D.—The Canistota Grain Co. has installed a new truck scale.

Andover, S. D.—The Bagley Elvtr. Co., owner of two elevators here, is wrecking one of the structures.

Missionhill, S. D.—The Farmers Union Co-op. Ass'n recently added a new hammer mill to its equipment, driven by a 75-h.p. motor.

Badger, S. D.—The Farmers Co-op. Grain Co. has improved its equipment by the installation of a new elevator leg and a new head drive.

Renner, S. D.—Improvements recently made at the elevator of the Farmers Elvtr. Co. include new grain cleaning equipment and a new office building.

Flandreau, S. D.—O. J. Aaker, former elevator man at this point and at Egan, S. D., died recently at the age of 86 years. He came to this county in the '70's.

Beresford, S. D.—E. F. Hedeon is the new manager of the Farmers Co-op. Elvtr. Co.'s elevator. New grain cleaning equipment was recently installed by the company.

Volga, S. D.—A new 15-ton scale was recently installed in its elevator driveway by George O. Cotton & Son, and a feeder and magnetic separator added to the equipment of the feed mill.

Summit, S. D.—The frozen body of Andrew P. Warness, who operated a feed mill here, was found in a snow bank on Dec. 11. Apparently, Mr. Warness lost his way in the storm and wandered around until exhausted. He was 65 years old.

Brookings, S. D.—A new corn drying unit was just completed for Geo. P. Sexauer & Sons, Inc., by the T. E. Ibberson Co. Grading and cleaning facilities were also provided in this plant, along with the necessary bins and heating equipment for handling corn products.

Meckling, S. D.—A new truck scale has been installed at the elevator of Steele Bros. & Orr, who contemplate adding new cleaning equipment also. Recently several hundred bus. of corn were run out on the ground by two young men, who stole 25 bus., which they afterward paid for with a jail sentence.

Rapid City, S. D.—Frank Smith, an employee of the Rapid River Milling Co., was held recently for investigation in connection with an alleged embezzlement of about \$2,400 from the company. Also held was a 17-year-old youth, accused of being an accomplice. The embezzlement consisted in issuing bogus receipts for grain, which were later cashed with forged names.

SOUTHEAST

St. Matthews, S. C.—Shuler & Smoak were the recent purchasers of a No. 548 Standard Seed Cleaner.

Albany, Ga.—The Thrift Milling Co. is the new name of the former Bennett Feed Store & Hatchery here, in which McH. Abel purchased a half interest from J. Frank Bennett. A feed mixing plant is now under construction and a full line of dairy, poultry and stock feeds will be manufactured. Mr. Abel has been with the Southern Milling Co., of Augusta, Ga., for the past three and a half years.

TENNESSEE

Nashville, Tenn.—Caswell E. Rose, head of the Caswell E. Rose Grain Co. for 39 years and a grain dealer of this city for 60 years, died Dec. 31, from pneumonia, at the age of 79 years.

Nashville, Tenn.—Four retail feed stores have been opened at convenient locations in Nashville by the Hermitage Feed Mills. The newest store is on Gallatin Road, and is managed by C. M. Harris.

TEXAS

Yorktown, Tex.—The Yorktown Union Gin Co. has completed installation of equipment for general feed mixing at its plant, and will mix feeds of all kinds for stock and poultry use.

WISCONSIN

Baldwin, Wis.—A new feed mixer was recently installed by the Farmers Co-op. Produce Co.

Sand Creek, Wis.—Thomas Pruzek has sold his grist mill to Mr. Anderson, of North Dakota.

Hurley, Wis.—The Northern Warehouse Co. recently installed a Kelly Duplex Corn Cutter and Grader with motor drive.

Vandyne, Wis.—A heart attack brot sudden death recently to James E. Binning, manager of a feed mill here. He was 55 years of age.

Star Prairie, Wis.—An oat huller and a feed mixer were recently added to the equipment of the Star Prairie Mill, of which L. W. Ash is the manager.

Rice Lake, Wis.—The Northern Supply Co., of Amery, Wis., has offered to lease a plot of land to open a grinding, feed and flour warehouse. The council offered a plot at a yearly rental of \$100 and was accepted.

Richland Center, Wis.—A new elevator, feed mill and seed plant, along with a warehouse and a store building, for the Farm Service Stores, Inc., at this station has just been completed by the T. E. Ibberson Co. A Munson Attrition Mill was used, Cleaners, 2-ton Strong-Scott Mixer and Speed King Cob Crusher. Fairbanks-Morse Motors were used thruout the plant, as well as Fairbanks Scales. The whole plant is covered with galvanized iron. Farm Service Stores have operated in this town for several years, and have been renting space in the old mill building here.

MILWAUKEE LETTER

E. G. Hadden, a member of the Milwaukee Grain & Stock Exchange since 1887, died at his home in this city Dec. 27, after an illness of only a few days. Mr. Hadden was well known as a grain trader in this market and had been in business as the Hadden Grain Co. and Hadden-Rodee Co.

Remarkable speed in elevator building is being shown in the construction of the new 950,000-bu. elevator of the Jos. Schlitz Brewing Co., the contract for which was given to the John S. Metcalf Co., as reported in the Dec. 9 Journals. With three shifts of men working day and night since Dec. 9, the structure is rising at the rate of 11 feet each working day. The elevator will be 162 feet high.

Milwaukee, Wis.—In his annual review Sec'y Plumb, of the Grain & Stock Exchange, mentions that the most important branch in the manufacture of products from grain at Milwaukee is the barley malting industry, and that it may be safely said that Milwaukee is the leading malting center in this country, if not in the world. Six large malting concerns are located here, and two of the great breweries also manufacture their own malt. Besides these there are a number of maltsters located at points in Wisconsin not far from Milwaukee who are members of the exchange and purchase their supplies of barley in the Milwaukee market.

[Concluded on page 26.]

Field Seeds

Kansas City, Mo.—The Bagnall Seed Co. has enlarged its warehouse space.

Sunnyside, Wash.—Henry Miller, of Ritzville, has opened a seed and feed store here.

Carroll, Ia.—The Earl E. May Seed Co. has opened a branch seed store here.

King City, Mo.—Murvin D. Maupin, sec'y of the Maupin Seed Co., passed away on Dec. 9.

West Union, Ia.—A seed and feed store has been opened by Fred Hatch, former Mount Pleasant dealer.

Urbana, Ill.—A corn show will be a feature of Farm & Home Week at the University of Illinois, Jan. 11-15.

Dassel, Minn.—K. L. Johnson, 57, retired pres. and general manager of the Dassel Seed Co., passed away last month.

Scottsbluff, Neb.—W. I. Lyons of Crawford opened a seed and retail seed and feed store here Jan. 1.

Tekamah, Neb.—The Yeager Seed Co. has leased a building for a seed store under the management of H. B. Nelson.

Ottumwa, Ia.—The Earl May Seed Co. has reopened its Ottumwa branch seed store under the management of J. B. Deck.

Saskatoon, Sask.—The Canadian Seed Growers Ass'n will hold its 1937 meeting at the University of Saskatchewan here in June.

Farwell, Tex.—Roberts Seed Co. is now operating a new seed warehouse and cleaning plant, specializing in sudan, cane, millet, kafir, hegari and maize.

Filer, Ida.—The United States Seed Co., of St. Louis, has a new 50x115 ft. hollow tile seed warehouse and cleaning plant, with trackage for three cars.

Eaton, O.—Paul C. Eikenberry has purchased the Eikenberry Bros. Co. seed store here and is continuing its operation as Eikenberry's Seed Store.

Waupaca, Wis.—Fire seriously damaged the seed, feed, salt and insecticide filled warehouse of the Central Wisconsin Seed Co. recently.

Morganfield, Ky.—Young & Conway took over the operation of the seed and wholesale departments of the Morganfield Hardware Co. Jan. 1, A. V. Conway continuing as manager.

Little Rock, Ark.—John R. Hackett, Seedsman, is the name under which Mr. Hackett has opened a retail seed store. He has been identified with Little Rock's retail seed trade for 12 years.

Chicago, Ill.—The executive com'te of the American Seed Trade Ass'n will meet in the Palmer House on Jan. 23. The Farm Seed

Group of the organization will hold its regular mid-winter meeting Jan. 25.

Buffalo, N. Y.—William J. Deer, superintendent for the Whitney-Eckstein Seed Co., died of pneumonia Dec. 22, after nine days of illness following operation for a ruptured appendix and intestinal disorder. Age 49.

Chicago, Ill.—Seedsman Charles A. Heath mailed an unusual Christmas card to the children of his world-wide contacts. It is a bound collection of 50 children's songs, in English, with music and silhouette illustrations.

Davenport, Ia.—Bruns Seed Co. has bought the 320-acre Just-A-Mere farm 11 miles east of De Witt. The Bruns brothers, A. R. and A. L., pres. and sec'y of the firm, will produce hybrid seed corn and conduct seed experiments on the farm.

Spokane, Wash.—Spokane Seed Co. has leased from its manager, C. C. Whealy, the one and two-story brick building in which it is housed, for a period of five years. The building was recently purchased by Mr. Whealy.

Marysville, Kan.—Five years in the state penitentiary was the punishment meted out to 46 year old seed salesman Charles Henning last month upon conviction before a local jury on counts of cheating and defrauding. Henning was alleged to have sold kafir seed, representing it to be Atlas sorgo, and to have misrepresented alfalfa seed offered for sale.

German seedsmen do not suffer from the gamble associated with fluctuating prices, as do the seedsmen of the United States. They buy at a fixed price, and sell at a fixed margin over the purchase price. Whether or not a German seedsman makes money depends upon his costs and upon the volume of business he develops. Help!

Sioux Falls, S. D.—Approximately 150 elevator managers, county agents and farmers attended the four day barley school and seed clinic conducted early this month, under the auspices of the Northwest Crop Improvement Ass'n and interested South Dakota institutions. Late last month such a school was conducted at Fargo, N. D. Another will be held at Grand Forks, N. D., in February.

Lafayette, Ind.—Demonstrations of seed cleaning and treating machines used in the Southwestern Indiana wheat improvement program are being featured at agricultural conferences beginning at Purdue University Jan. 11, and the University of Illinois, Jan. 18, announces C. E. Skiver of Purdue's agronomy department. Igleheart Bros., Inc., is supplying the machine, exhibited by Warren Thompson, one of the oldest operators.—C.

Shenandoah, Ia.—A note for \$5,690 is involved in Henry Field Seed Co. v. the Henry Field Co., a petition filed for the next court term. The charge is that on Aug. 15, 1933, the Henry Field Co. issued the note to Henry Field, who transferred same to Claude B. Newland. No interest and no part of the principal has been paid on this note, which is now the property of the plaintiff.

Ames, Ia.—Iowa has sufficient seed corn to meet requirements, believes Joe L. Robinson of Iowa State College. Certain sections of the state, due to severe drouth, or grasshopper infestations, produced less seed corn than they require, but seed corn from north and east sections will meet requirements in southern and western sections of the state. Germination tests on 1936 seed corn have been uniformly good. About 100,-

000 bus. of certified hybrid seed has already been sold.

Washington, D. C.—"The Co-operative G.L.F. Mills, Inc., Buffalo, N. Y.," states a Department of Agriculture press release, "pleaded guilty to two informations charging violation of the Insecticide Act in the misbranding and adulteration of 'G.L.F. Copper Lime Dust,' and misbranding of 'G.L.F. Lime Sulphur Solution.' The latter product contained more than 68% of water and the label bore no ingredient statement. The Copper Lime Dust fell below the professed standard and quality under which it was sold, containing less than the 15% of calcium arsenate claimed on the label. A fine of \$150 was imposed."

Canada Develops Perennial Wheat

Cross-breeding ordinary strains of wheat with agropyron, close kin to the common couch grass of eastern Canada and the crested wheat grass of western Canada, Canadian plant breeders on experimental farms have developed a plant with the seed of ordinary wheat and the long-lived roots of grass.

Seeds of the hybrid are smaller and lighter than wheat. Scientists doubt that the perennial wheat will ever be suitable for making bread, but believe it may restore large drouth ravaged areas in western Canada to productive use.

Prosecutions Under Federal Seed Act

Up to July 1, 1936, the Department of Agriculture had recommended 224 actions under section 6 of the Federal Seed Act, 38 per cent of all the seizure actions and 23 per cent of all criminal actions were rather evenly divided among three firms and their affiliates.

Of 286 shipments involved (some cases dealt with more than one shipment), 157 were misbranded as to germination, 61 as to purity, 57 as to noxious weed seed, 49 as to variety, 47 as to weed seeds, 20 as to inert matter, 10 as to origin, 4 as to the content of other crop seed. Several shipments were misbranded in respect to more than one item.

It was found in some instances, after complete facts became available, that the test quoted on the label was not on a sample representative of the shipment in question.

There has been no case under the Federal Seed Act where tests made by state officials were not substantiated in the seed laboratory of the bureau.

Seed Dealers Confer

A seed dealers' conference was held Jan. 8 under the auspices of the New Jersey Agricultural Extension Service at College Farm, New Brunswick, New Jersey.

Before the field crop session the following addresses were delivered:

"Recommended Varieties of Field Crops for New Jersey," by Dr. H. B. Sprague, agronomist at the experiment station.

"State Certification of Crop Seed," by Paul B. Mott, of the State Department of Agriculture, at Trenton, New Jersey.

"Producing Improved Corn Seed," by D. S. H. Croshaw, of Wrightstown, N. J.

"What Improved Crop Seed Means to the Farmer," by C. E. Snyder, of Pittstown, N. J.

"State Certified Seed from the Dealers' Standpoint," by Clarence Wheeler, Farmers' Co-operative Ass'n, Trenton, N. J.

"The Clover Seed Situation," by Dr. H. B. Sprague, agronomist at the experiment station.

"Testing Crop Seed at the State Seed Laboratory," by Jessie G. Fiske, state seed analyst.

Directory

Grass and Field Seed Dealers

CRAWFORDSVILLE, IND.

Crabbs, Reynolds, Taylor Co., clover, timothy.

GREEN SPRINGS, OHIO

The O & M Seed Co., seed merchants.

PAULDING, O.

Stoller's Seed House, wholesale field seeds.

ST. LOUIS, MO.

Mangelsdorf & Bro., Ed. F., wholesale field seeds.

Scott, T. Maurice, field seeds, carlot originator.

SAULT STE. MARIE, MICH.

Soo Terminal Co., grass, flax, peas.

SIOUX CITY, IOWA

Sioux City Seed Co., seed merchants.

Follow Soybeans Closely, Advises Seedsman

"Every seedsman should be a farmer in theory, if not in fact, so he can more efficiently serve his clientele," said Jacob Hartz, Stuttgart, Ark., seedsman, speaking before the recent midwinter meeting of the Southern Seedsmen's Ass'n.

"In our opinion, soybeans will be a major crop in the South in the next decade. Had we been told ten years ago that the United States would produce a 40,000,000 bus crop in 1935, we would have laughed and it would have been a better laugh had anyone even suggested that soybeans would be traded on the Chicago Board of Trade in both spots and futures in 1936.

"Our prediction that soybeans will become a major crop in the South is based on three fundamentals: First, the plant is adapted to all cotton growing sections; second, soybeans are recognized as a land builder and forage crop; third, the cotton seed crushing industry is highly over-industrialized and is clamoring for an auxiliary product with which to keep its plants busy. This situation has become pronounced since the A. A. A. curtailed cotton acreage.

"It appears to be good business for the Southern seedmen to give careful attention to potential possibilities for soybeans in the next few years. Every seedsman should acquaint himself with each new variety as it is developed so he can intelligently recommend the proper varieties of beans to his farmer customers.

"A friend of mine refers to soybeans as the Triple Threat of the legume plants: First, as a soil builder; second, as a forage crop; third, as a grain crop. As a summer legume for soil building most southern seedsmen will agree soybeans have no peer. The crop adapts itself to most every type of soil, and will do well wherever corn or cotton is grown.

"As forage, soybean hay can be produced more cheaply in the South than any other legume. When the proper hay varieties are seeded, such as O-Too-Tan and Southern Laredos, yields of two, to three and one-half tons of hay per acre are being made, depending of course on the richness of the soil.

"The greatest possibility for soybeans in the South is as a grain producer. Illinois, Indiana and Iowa farmers are finding soybeans profitable on their best corn lands.

"Soybeans are sold to the soybean oil crushing industry. This new industry has developed in the north in the last ten years, and is giving our cottonseed crushers severe competition, which the cottonseed crushers would have been better able to meet, had they recognized the soybean possibilities as an auxiliary crushing crop.

"Twelve years ago when we started the farmers to growing soybeans in our section of Arkansas, we were told by a prominent Southern seed jobber that he believed soybeans had reached the top in sales volume and that southern farmers would soon stop growing them. Sales of soybean seed have trebled since then.

"If the seedsmen of the South would keep informed on the new varieties that are being introduced, they could better advise farmer customers on the crop that has many more possibilities as a volume producer in the next ten years, than it has had in the past ten."

Canada Distributes Resistant Wheat

Distribution of 8,000 bus. of rust-resistant wheat seed will be made in western Canada in the spring. The new wheat, "Apex" and "Renown" have qualified in their resistance to rust, and in their milling and baking quality. The Apex, 2,000 bus. of it, will be distributed in west and northwest areas of the prairie provinces, while 6,000 bus. of Renown will go to Manitoba and eastern Saskatchewan. Stronger in straw than Apex, Renown will be sown on the heavier lands.

Apex was developed at Saskatoon, Renown at Winnipeg. Average yields in the past four seasons show Apex yielding 24.6 bus. to the acre and Renown 26.3 bus. Marquis wheat at the same stations yielded only 20 bus. and Reward 21 bus. in comparative tests.

Exceeding both the old and the new wheats

Seed Movement in December

Receipts and shipments of seed at the various markets during December, compared with December in 1935, in bushels, were:

	Receipts		Shipments	
	1936	1935	1936	1935
FLAXSEED				
Chicago	204,000	251,000	74,000	28,000
Duluth	112,917	8,238	255,834	211,261
Ft. William	41,237	42,103	55,153	80,127
Minneapolis	387,420	575,270	75,510	122,010
Superior	112,880	4,365	125,986	90,949
KAFIR AND MILO				
Hutchinson	28,600	15,400	.....	.....
Kansas City	117,600	51,200	54,000	27,200
St. Louis	15,400	25,200	7,200	2,800
Wichita	14,300	1,300	3,900	1,300
CANE SEED				
Ft. Worth	15,400	3,300	1,100	.....
Kansas City	14,000	7,000	600	.....
Wichita	2,600	.....	1,300	.....
SORGHUMS				
Ft. Worth	268,800	128,800	203,000	113,400
CLOVER				
Chicago, lbs.	1,246,000	716,000	408,000	1,049,000
Milwaukee, lbs.	257,775	585,830	40,860	57,220
TIMOTHY				
Chicago, lbs.	290,000	1,493,000	173,000	864,000
Milwaukee, lbs.	141,770	1,362,475	.....	30,240
SOYBEANS				
Chicago	742,000	1,513,000	398,000	135,000
Cincinnati	2,800	1,400	.....	.....
Indianapolis	74,000	.....	26,000	.....
Peoria	112,000	576,000	.....	.....
St. Louis	38,400	494,100	6,400	346,500
Toledo	114,800	.....	.....	.....

in yield per acre is the new Thatcher, brought in from the United States and now fairly well distributed in the rust areas of Manitoba Thatcher, in the last four seasons, yielded 29.9 bus. per acre, and matured more quickly than any other wheat in the trials except Reward.

Hybrid Corn Gives Superior Yields

Adapted hybrid corn gives yields superior to all local varieties and the farmer's own corn, said Purdue University, following trials in 46 Indiana counties during the last growing season.

The average increase in yield for adapted Indiana hybrids has been 11.9 bus. per acre. Based on the average yield of 48.4 bus. of corn per acre for the demonstrator's variety, this is an increase of 24.6%.

Hybrids outyielded local varieties consistently, giving the highest yield in 94% of the trials.

Disease-Resistant Crops Possible

Development of inbred lines of crop seeds, each line bred pure to resist a specific disease, or diseases, is regarded as probable by Dr. G. H. Coons, retiring president of the American Phytopathological Society. Crossing of these inbred lines, believes Dr. Coons, should give disease resistance to hybrid seed, plus the traditional hybrid vigor that follows the first generation of crosses.

Breeding and introduction of disease-resistant varieties of 17 important field and truck crops have greatly increased their value, stated Dr. Coons before the meeting of his Society at Atlantic City.

Several of the good milling wheats are more or less resistant to rust, bunt, and scab. These disease resistant varieties were planted on 39,000,000 of the 50,000,000 acres planted in 1935 and accounted for a 5% increase in the production over the production likely had ordinary seed wheat been used.

Improved varieties of flax grow in spite of wilt, and account for nearly all the flax grown in this country.

IF IT IS SEED

OATS YOU WANT—

Read—"KNOW WHAT YOU BUY AND SELL" Nov. 11th issue

"WHAT PRICE VICTORY?" Nov. 25th issue

"WHO HAS SEED OATS?" Dec. 9th issue

MARSHALL C. RUMSEY, Batavia, N. Y.
ORIGINAL SVALOF OATS.

T. MAURICE SCOTT BUYER

FIELD SEEDS

What Have You to Offer?

419 Merchants Exch. Main 2007
ST. LOUIS, MO.

ED. F. MANGELSDORF & BRO.

Buyers and sellers of

Sweet Clover, Alfalfa, Lespedeza, Clovers, Timothy, Grasses, Fodder, Seeds, Sudan Grass, Soy Beans, Cow Peas
St. Louis, Missouri

Rudy-Patrick Seed Company KANSAS CITY, MO.

BUYERS — SELLERS

Clover, Alfalfa and Timothy Seeds

OFFERS SOLICITED

CRABBS REYNOLDS TAYLOR CO. CRAWFORDSVILLE, IND.


GRAIN

Clover and Timothy Seeds

Get in Touch With Us

YIELD DEPENDABILITY

A feeling of confidence goes with
the planting of the uniformly
excellent O. & M.



FIELD CORN
SWEET CORN
SEED OATS
SEED BARLEY
GARDEN SEED
GRASS SEED

Write for catalog and prices

The O. & M. Seed Co.
— Growers —
GREEN SPRINGS, OHIO

SEEDS

ALL KINDS — ANY QUANTITY

Write, wire or phone our
nearest warehouse.

Dependable Service

SIoux CITY SEED CO.

SIoux CITY, IA.
CARROLL, IA.
ALGONA, IA.
NORFOLK, NEB.

SIoux FALLS, S. D.
FAIRMONT, MINN.
ALBERT LEA, MINN.
BILLINGS, MONT.

Grain Carriers

Chicago, Ill.—In annual meeting Jan. 7 the Midwest Shippers Advisory Board pledged opposition to the proposed six-hour day legislation for railway labor.

Washington, D. C.—Commissioner Carroll Miller has been elected chairman of the Interstate Commerce Commission, succeeding Commissioner Charles D. Mahaffie.

Chicago, Ill.—Middle-western petroleum truckers organized Petroleum Carriers, Inc., at a meeting Jan. 6. A permanent organization will be perfected at Toledo, O., Jan. 16.

Chicago, Ill.—A three-judge court on Jan. 29 will hear the injunction suit of truck operators seeking to restrain Illinois officials from enforcing the truck weight and length law of the state.

Southern carriers, railroads and steamships, were permitted to increase a number of southern rates Dec. 31, the increases being about equal to emergency charges which expired on that date.

Petitions of the Illinois Freight Ass'n territory and the Chicago Ass'n of Commerce for reopening of No. 27425, Official Territory pick-up and delivery service, have been denied by the I.C.C.

Tolls collected on 87,603 vessels that transited the Panama canal since it was opened, Aug. 15, 1914, to the close of the 1935-36 fiscal year, have totaled \$383,113,811.01, reports Gov. C. S. Ridley of the canal.

Washington, D. C.—Grain and grain products were loaded into 24,188 cars during the week ended Dec. 26, compared with 19,744 cars during the same week a year ago. During the 52 weeks ending on the same date grain and grain products were loaded into 1,803,307 cars, compared with 1,577,053 cars during 1935.—Ass'n of American Railroads.

Chicago, Ill.—The Illinois Central railroad expects to purchase immediately \$9,000,000 worth of new equipment, including 1,800 new box cars. Of the latter 1,000 will be 40 ft. long and 800 will be 50 ft. long. All will have capacity for 40 tons, and be built of steel with wood lining. This should help to reduce shortages in grain shipments over this line.

Washington, D. C.—The Inland Waterways Corp. earned a net income of \$899,769 handling 2,376,366 tons of freight thru itself and its subsidiary, the Warrior River Terminal Co., during the fiscal year ended June 30, last, reports Sec'y Woodring. Gross revenue totaled \$6,900,685, and gross expenses, including depreciation, \$6,000,915.

Minneapolis, Minn.—Ocean freight rates between River Plate ports and the United States are over 100% higher than last year. Vessels for January shipment are practically unobtainable, express steamers are booked solid through March. United States lined mills are running at capacity. The supply situation is very tight.—Archer-Daniels-Midland Co.

Toronto, Can.—The Upper Lakes & St. Lawrence Transportation Co., Ltd., subsidiary of the Norris Grain Co., Winnipeg, but operated by Toronto Elevators, Ltd., has bought the last 10 of the lake vessels of the Eastern Steamship Co. Acquisition of 20 grain carrying vessels places the Toronto company among the largest operators on the Great Lakes.

The C. & N. W. and other railroads have been authorized to continue drouth rates on hay, feed and forages from Idaho, northern Illinois, Iowa, the upper peninsula of Michigan, Minnesota, Montana, Nebraska, Wisconsin, Washington, Wyoming, Atchison and Leavenworth, Kan., Kansas City, Mo.,

Kan., and St. Joseph, Mo., to points in drouth regions of the Dakotas until Mar. 31.

Chicago, Ill.—A sub-committee of the Central Freight Ass'n considered export rates on grain, grain products and grain by-products a few days ago. Revision of the export rates from Central Freight Ass'n territory and Illinois to north Atlantic ports so that the differential between export and domestic rates from all origins will be the same as between Chicago (reshipped) export and domestic rates is proposed.

Washington, D. C.—Senator Arthur H. Vandenberg, of Michigan, vigorously opposed construction of the proposed Florida ship canal in a brief filed with the board of engineers for rivers and harbors. The board's own referendum of 74 ship operators, stated the senator, found only 19% favorably interested. Others oppose the project and deny any expectation of using the canal should it be built.

Washington, D. C.—In a surprise move seeking early decision on proposed freight rate adjustments to cover emergency charges that expired on Dec. 31 the railroads asked the Interstate Commerce Commission, now conducting hearings on proposed increases, to decide on the rates proposed for certain leading commodities without waiting for completion of testimony on all rates involved. Shipping interests immediately opposed the request.

Buffalo, N. Y.—Summer rates on rail shipments of grain to the Atlantic Seaboard closed Dec. 15 with the winter closing of barge movement of grain. Summer grain rates are 5c a bu. so the railroads can compete with the barge canal. With the closing of the canal rail rates automatically jump to 6½c. Carloadings of grain at this market in the last few weeks before the increase in rate have been exceptionally heavy, the best in years.

Chicago, Ill.—Hearings began Jan. 11 before Examiners Arthur R. Mackley and Geo. J. Hall on the complaint of mid-west grain and flour interests that interior mills enjoy transit privileges not accorded mills at rate break points like Minneapolis, Omaha, Atchison, Leavenworth and Kansas City, due to the I.C.C. order in the general grain rate investigation. The complaint contends that the effect of the order violates the first three sections of the Interstate Commerce Act.

Stockton, Cal.—In a spirit of co-operation Port of Stockton officials, early last month, wrote 37 shippers whose freight awaited settlement of the maritime strike: "We feel in the present instance that shippers as well as ourselves have been penalized by the present situation, and accordingly we are writing to let you know that we will charge no demurrage on your shipments on our wharves consigned to definite steamer, this arrangement to be in effect until midnight, Dec. 31."

Chicago, Ill.—Railroads, in 1936, built 93 miles of new line—about twice as much as in 1935. Meantime, the abandonment of old lines continued, altho not quite as rapidly as in 1935. The total mileage abandoned was 1,523. This was the fifth consecutive year that abandonments exceeded 1,000 miles. They aggregated 1,452 miles in 1932; 1,876 miles in 1933; 1,995 miles in 1934; 1,843 in 1935—a total in five years of 8,689 miles. The new mileage built meantime was 401 miles.—Railway Age.

Duluth, Minn.—In the 1936 navigation season freight tonnage shipments through the St. Mary's canal increased 44% over 1935, Isaac De Young, general superintendent, states in his yearly report. The total freight passing thru the canal, 69,528,000 tons, was the highest since 1930. There was a falling off in wheat tonnage of 9% and a 4% reduction in flour shipments, while iron ore and coal tonnage recorded largest gains. Total wheat bushels were 162,678,395 and coarse grains 50,075,772 bus. The 1936 flour shipments reached 6,566,427 bbls.—F. G. C.

Texas Grain Dealers to Fight Trucks

At a meeting in Fort Worth Dec. 14 representatives of grain shippers, lumber and produce dealers, and wholesale grocery men formed the Associated Country Merchants of Texas. They discussed a bill for regulation of trucks, to be presented to the coming legislature.

On the executive committee of this new affiliate of the Associated Southwest Country Elevators is the pres., sec'y, and one member from each group interested. The Texas Grain & Feed Dealers Ass'n was represented by S. E. Cone, pres., G. E. Blewett, sec'y.

Decisions and New Complaints

Before the Interstate Commerce Commission:

Denial of fourth section relief in No. 16224, salt from Louisiana, Texas, and Kansas to destinations in southern territory and New Mexico, has been recommended by Examiner C. K. Glover.

Dismissal of No. 27189, Sioux City Seed Co., v. C. & N.W. et al, was proposed by Examiner Harold M. Brown. Carload rates on sweet clover seed, Norfolk, Neb., Milwaukee, Wis., and Carroll, Ia., to Sioux City, Ia., Kansas City, Mo., Marysville, O., Peoria, Ill., and Minneapolis, Minn., between Sept. 29, 1933, and Oct. 4, 1934, were not proved to have been unreasonable.

Rate Changes in Southeast Proposed

Proposed reductions in rail rates from Ohio and Mississippi river gateways to inland points in the South Atlantic states, amounting to from 2 to 2½c per cwt., and proposed increases of from 2 to 16c in rail rates from Atlantic and Gulf ports to the same territory, aroused a protest meeting of Oregon and Washington wheat growers, shippers, millers and public utility commissioners last month.

Representatives of interested Pacific Northwest organizations will attend the Interstate Commerce Commission hearing at Atlanta Jan. 15 to say that the Pacific Northwest's soft milling wheat is best utilized in domestic consumption, and that a 15,000,000 bu. annual wheat and flour trade to South Atlantic states is jeopardized.—FKH.

Restraint of Interstate Trucks Prevented in Iowa

Sidney H. Johnson, Des Moines, acting for a group of interstate trucking companies and individuals, and backed by a number of trucking organizations, including the American Trucking Ass'n, Inc., has been granted an injunction restraining Iowa state, county, and city officials from enforcing the recently enacted Iowa motor vehicle act. A permanent injunction will be sought before a three-judge tribunal in Des Moines, Jan. 21.

This case, as well as three previous injunctions, takes refuge in the federal Motor Carrier Act of 1935, which regulates motor carriers doing interstate business.

The first injunction of this kind was issued in South Carolina against the state's minimum weight law, which the truckers contended was discriminatory and contrary to the provisions of the Motor Carrier Act. The second was secured by the Illinois-Minnesota Motor Carriers conference at Chicago, restraining state and city officials from enforcing weight and length restrictions. The third was secured by the Cushman Motor Delivery Co. against the state of Indiana, which had sought to prevent extension of its routed service thru the state.

One of the most noteworthy improvements in railway service has been the acceleration of both freight and passenger train movements.

I.C.C. Ruling Causes Suit

Charles P. Megan, trustee of the Chicago & Northwestern railroad, has brought suit against the Updike Grain Corp., of Omaha, asking judgment of \$14,469.99 and interest, due the railroad for rental of the Northwestern's terminal elevator in Council Bluffs during October, November and December.

Under a 5-year lease, dated Nov. 23, 1928, and a supplement extending the lease an additional five years, the Updike Grain Corp. agreed to pay the railroad \$4,823.33 rent on the first day of each month. Payment was made regularly until the last three months.

The rental rate is excessive, contends the Updike Grain Corp., because it is based on the value of the elevator prior to the I.C.C. ruling of July 1, 1935, following the general rate investigation which permitted transit privileges at interior points but denied existing privileges at Missouri river rate break points like Atchison, Kansas City, Omaha and others. On these transit privileges the Omaha Grain Exchange was organized and built. Denial of these privileges is destroying the market and the value of its elevators.

Maritime Strike Relief

At Portland, Ore., where the Marine and Waterfront Unions stopped all receiving and shipping on the waterfront, farmers and feed men pleaded with representatives of the strikers to permit unloading of the 4,700 ton cargo of Argentine corn in the hold of the motorship *Primero*, so that chickens and livestock might be adequately fed.

"It is not the union's intention at any time to place a burden upon the farmers," answered union spokesmen in agreeing to unload the cargo. But they placed so many restrictions on the unloading of the cargo that they cast reflection on good intent, demanding that no profit be made on the corn; that the corn go only to those who are in absolute need; that stevedores be eliminated, thus forcing importers to take out federal licenses for stevedoring work, and posting a bond to do so.

Three weeks of argument with the unions began the work of unloading the *Primero* the day before Christmas. Later the grain exporters and the grain handlers' division of the International Longshoremen's Ass'n agreed to wage increases of about 15c an hour, that grain handlers immediately return to work to handle grain between freight cars and docks, but not between docks and ships until the general maritime strike is settled. Elevator and mill warehousemen in San Francisco are also reported to have signed an agreement and returned to work.

Seattle boats have moved to Vancouver, B. C., for discharge. Their cargoes of corn are being shipped to interior points in the United States by rail, but around port cities the unions refuse to handle the shipments. The rush of ships to unload at Vancouver during the last half of December broke records of 10 years' standing.

Approximately 35,000 tons of Argentine corn remain untouched in the holds of vessels in the Los Angeles harbor. Representing an investment of \$1,500,000 in good condition, the corn is heating and in a number of cases is in serious condition, one vessel reporting corn stalks two feet high grown out of the top layer of a cargo held in the harbor more than 70 days. Some cargo owners have sought to stem deterioration by filling the holds with dry ice. Some of the corn has been hopelessly sold on the Los Angeles Grain Exchange at \$10 to \$20 a ton; if, as, and when unloaded.

Unions at Los Angeles have officially advised grain and feed tradesmen that the Pacific maritime strike is committed to a definite policy of leaving all cargoes untouched until the end of the strike, regardless of the pleas of farmers

and livestock feeders, considering the unloading of the *Primero* at Portland as a sad mistake.

A number of strike bills are expected to be presented to the legislatures of Pacific Coast states, which have suffered so severely from the prolonged Maritime strike. One proposal is that both labor unions and employers be licensed, revocation of license to follow should either party refuse to arbitrate differences.

All Water Route to East Is Proposed

W. H. Rutland, New York City, former sugar refining company traffic manager, is actively promoting river traffic in the United States. He is reported to have backing from a group of large corporations in the coal, ore and automobile industries.

Mr. Rutland's plan calls for use of 20x8x8 ft. stainless steel containers, with capacity for 15 tons each. Such containers contemplate bulk handling of wheat or flour, and would have remarkable flexibility because they could be set directly on a truck chassis, and could be lifted off and set on flat cars, in the holds of ocean steamers, or in the holds of barges, with derricks, at minimum handling costs.

The plan presumes more complete development of river transportation and maintenance of adequate river channels thru development of dams near headwaters of the Mississippi and Missouri rivers (projects now under way) by the federal government, new and faster barges and tow boats, and adequate facilities at river points for both receiving and shipping grain. These latter, he believes, could be built by locally controlled corporations, set up to manage the port, and split all profits above a reasonable return on the investment, between the corporation and the municipality.

Spanish War Affects American Cargo

Steaming from Buenos Aires with a \$400,000 cargo of flaxseed for delivery to the Archer-Daniels-Midland Co. at Edgewater, N. J., the Spanish steamer *Motomar* was intercepted late last month by representatives of the Spanish loyalists and diverted to Vera Cruz, Mex., to pick up a cargo of airplanes bought by the Spanish government.

Protests to Washington officials set the wheels of diplomacy in motion, causing the Spanish government to order release of the American owned cargo, and to assure the Archer-Daniels-Midland Co. that it would be reimbursed for any losses or damage growing out of diversion of the ship.

Arrangements were made to transfer the cargo of flaxseed to the holds of three smaller vessels at Vera Cruz, and for continuation of its passage to Edgewater.

Illinois Insurance against Occupational Disease

The Industrial Commission of Illinois has received acceptances of the new law from 80,000 employers who may be liable under the occupational diseases act, but it has no facilities for indexing them to determine which of the employers come under its jurisdiction.

Some employers will be unable to get insurance.

One underwriter who has examined many important risks during the last two years for their O. D. hazards, declared he does not recall a single plant which had any former employees disabled as the result of dust exposure. Many of the men who are now on the job were exposed, the X-rays showed, to a degree where the insurance company would not assume any liability for them. But in no instance, the underwriter said, were there any men who had formerly worked at the plant really disabled later as a result.

Calendars Received

Calendars for 1937 have been received from the following:

Link-Belt Co., Chicago, Ill.
Morse Chain Co., Ithaca, N. Y.
Allied Mills, Inc., Chicago, Ill.
Corneli Seed Co., St. Louis, Mo.
General Electric Co., Chicago, Ill.
John E. Brennan & Co., Chicago, Ill.
Columbian Rope Co., Auburn, N. Y.
Eagle Roller Mill Co., New Ulm, Minn.
International Harvester Co., Chicago, Ill.
Weller Metal Products Co., Chicago, Ill.
Lumbermen's Mutual Casualty Co., Chicago, Ill.

Henry Simon, Ltd., Cheadle Heath, Stockport, Eng.

Grain Insurance & Guarantee Co., Winnipeg, Man.

A number of the 1937 calendars are artistic masterpieces, handsomely lithographed and are attractive adornment for any office wall.

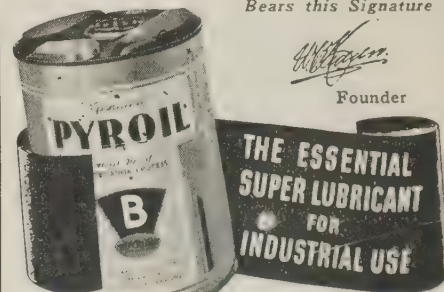
AS MUCH AS **90%**
INCREASE IN
FILM STRENGTH
PLUS

**Reduced Surface Tension
Lowered Temperatures
Increased Power Output**

The decided improvement in operation effected when Pyroil is added to the regular lubricants used has caused the adoption of this famous super-lubricant by the largest industries and plants in this country and many others.

Pyroil readily proves its efficiency. Its corrosion inhibiting qualities alone make it desirable for the protection of many present day metals and alloys. Mail coupon for interesting facts. No obligation. Manufactured and Guaranteed by Pyroil Company, W. V. Kidder, Founder, 285 La Follette Ave., LaCrosse, Wis., U. S. A.

Every Container
Bears this Signature



PYROIL COMPANY
285 La Follette Ave.
LaCrosse, Wis., U. S. A.

Please send facts of Improved Pyroil's unusual efficiency.

Name

Address

City

State

New!

20th Edition

Feeds & Feeding

by

F. B. Morrison

This edition has been entirely rewritten and revised to contain the latest information on live stock feeding and nutrition. Entirely new compilations of recent analyses of American feeds are presented in the Appendix Tables. Extensive data are presented concerning the mineral and vitamin content of important feeds.

The only authoritative book on the subject of animal feeds and feeding. The result of, over 38 years of exhaustive work in experimentation.

Its three parts, each divided into numerous chapters, cover "Fundamentals of American Nutrition," "Feeding Stuffs," "Feeding Farm Animals." This new edition contains approximately 40% more material than the 19th edition, and contains 1,156 pages, including 95 informative illustrations. This book will enable any grinder and mixer of feeds more intelligently to suggest and compound worth while rations. Beautifully bound in black keretol, durable covers; weight 5 pounds, price \$5.00 plus postage. Send for your copy now.

Grain & Feed Journals

Consolidated

332 S. La Salle St.

Chicago, Ill.

Feedstuffs

Des Moines, Ia.—A membership meeting was held by the Independent Feed Dealers of Iowa on Jan. 12. The organization already has about 200 members.

Forest Lake, Minn.—A district meeting of the Northwest Retail Feed Dealers Ass'n was held here Dec. 14, E. J. Houle presiding, Paul Scheuneman, Minneapolis, was the principal speaker.

Syracuse, N. Y.—The Eastern Federation of Feed Merchants will hold its annual convention in the Onondaga hotel, Feb. 26-27, the first two-day convention to be held by the federation in several years. Louis E. Thompson, Glen Ridge, N. J., is sec'y.

Washington, D. C.—The index of feed prices advanced 4 points December, standing at 137 in the mid-December review. Feed represents one of the expensive items of farmer purchases this winter. Prices of items other than feed are estimated to have shown little change.—Buro of Agricultural Economics.

Astoria, Ore.—Meeting at the Merwyn hotel on Dec. 16, feed dealers of Astoria and vicinity organized to solve local problems. Present were Howard Hadley, pres. of the Oregon Feed Dealers Ass'n; Roy Adams, treas.; Leon S. Jackson, manager, and a number of dealers from the district. A second meeting was held Jan. 8.

Washington, D. C.—An increase of about 6% in the fall pig crop of 1936 over that of 1935, an increase of about 20% in the combined spring and fall crops of 1936 over that of 1935 and a prospective decrease of 5% in the number of sows to farrow in the spring of 1937 from the number farrowed in the spring of 1936 are shown for the United States. The number of pigs saved in the fall season of 1936 (June 1 to Dec. 1) is estimated at 23,815,000 head, or 6% larger than the number saved in the fall season of 1935 but is 11% less than the 5-year (1930-34) average. The fall pig crop this year was substantially larger than last year in all re-

gions except in the West North Central States. There was a 4% increase in the number of sows farrowed this fall compared with last fall.—Buro of Agricultural Economics.

Iowa Feed Dealers Develop Finance Plan

Pioneering in a new division of ass'n activity the organization com'tee of the Independent Feed Dealers of Iowa has worked out a plan whereby every member of the ass'n can finance sales of feed.

"To our knowledge," said Geo. H. Schaaf, Des Moines, sec'y, in announcing a general meeting of the membership for Jan. 12, "no other feed ass'n has attempted a finance plan. Bankers and lawyers say that our plan is workable. The board of directors has approved it. Now it is up to our membership to vote on whether, as an ass'n, we will adopt it."

December Pig Report

Pigs saved in the fall of 1936 in the United States is estimated at 23,815,000 head. This is 1,240,000, or 6%, larger than the fall crop of 1935, but 11% less than the 5-year average. Increases appeared in all but the west north central states.

The combined spring and fall pig crop of 1936 for the United States is estimated at 65,699,000 head. This number is 10,744,000 head or 20% larger than the small crop of 1935 but is 8,461,000 head or 11% smaller than the 5-year (1930-34) average crops. For the Corn Belt States the combined crop this year of 45,282,000 head is 7,325,000 head or 19% larger than that of 1935.—U. S. Department of Agriculture.

Vitamin B deficiency prevents or limits growth in young stock, and causes nervous disorders in both young and old.



WIZARD MIXERS

built strong and sturdy. New reduced prices make Wizard biggest mixer value on the market. 500, 1,000 and 2,000 lb. sizes. Write for prices and literature.

MIDWEST STEEL PRODUCTS CO.

728 E Delaware Street
KANSAS CITY, MO.

Feed Prices

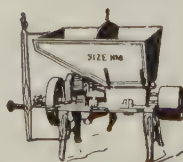
The following table shows the closing bid price each week for January futures of standard bran and gray shorts, spot cottonseed meal, soybean oil meal and alfalfa meal, in dollars per ton, and No. 2 yellow corn and No. 2 yellow soybeans in cents per bushel:

	Minneapolis Spot		Kansas City	
	Bran	Midds.	Bran	Shorts
Sept. 19.....	23.50	26.50	23.50	26.75
Oct. 17.....	26.00	31.00	25.20	28.95
Nov. 14.....	29.50	34.50	28.35	31.50
Dec. 12.....	33.00	34.00	29.60	32.75
Dec. 19.....	32.50	33.00	30.40	33.15
Dec. 26.....	32.00	32.50	29.85	32.40
Dec. 31.....	31.75	32.00	30.35	32.65
Jan. 9.....	34.00	34.00	33.35	35.30
	St. Louis		Chicago	
	Bran	Shorts	Beans	Soy. Meal
Sept. 19.....	25.00	27.50	1.19	40.50
Oct. 17.....	26.90	29.50	1.20 3/4	36.40
Nov. 14.....	29.90	32.25	1.26 1/4	38.90
Dec. 12.....	31.55	34.75	1.44	41.40
Dec. 19.....	32.25	34.25	1.57	42.40
Dec. 26.....	32.00	34.00	1.52	42.00
Dec. 31.....	32.50	34.25	1.55	42.90
Jan. 9.....	35.45	36.75	1.61 1/4	42.90
	Cottonseed Meal		Denver	
	Ft. Worth	Memphis	Alfalfa	Chicago Corn
Sept. 19.....	36.00	32.50	28.00	1.17
Oct. 17.....	35.00	29.50	28.00	1.07
Nov. 14.....	35.00	32.00	28.00	1.12
Dec. 12.....	37.00	34.50	28.00	1.12
Dec. 19.....	38.00	34.50	28.00	1.11 1/2
Dec. 26.....	38.00	34.15	28.00	1.10 1/2
Dec. 31.....	38.00	36.00	.....	1.12
Jan. 9.....	38.00	35.00	.....	1.13 1/2

BOWSHER Crush Grind Feed Mills Mix

Rapidly crush ear corn (with or without husk) and grind all the small grains; either separately or mixed—mixed as they are being ground—not before or after. This saves time and labor.

"COMBINATION" MILLS



Use the famous Cone-Shape burrs. Light Draft. Large Capacity. Solidly Built. Long Life. Special sizes for the milling trade. Sacking or Wagon Box Elevator. Circular on request.

THE N. P. BOWSHER CO.

SOUTH BEND

INDIANA

Solvent Extracted Soy Meal

The demand of the public for facts relative to the feeding value of soybean oil meal is so great that the Archer-Daniels-Midland Co. has issued a leaflet describing solvent extracted oil meal, in which it is stated that our leading experts in animal nutrition report that the protein of properly prepared soybean oil meal is the most complete of all proteins contained in supplements that are of vegetable origin. They state further that properly prepared soybean oil meal contains proteins similar to milk proteins in feeding value and in many cases they find the proteins of soybean oil meal superior to other forms of animal protein.

Authorities specify that soybean oil meal must be properly cooked to contain efficient proteins. They report a low feeding value for improperly cooked soybean oil meal, that is meals prepared at low temperature especially where dry heat is used for a very short time. The feeding value of these low temperature meals is, in fact, no better than that of the raw soybeans. When, however, the meal is properly cooked, especially where moist heat (live steam) is used and the temperatures maintained are sufficient for complete cooking, these experimenters have found soybean oil meal to contain proteins which are 50 to 100% more efficient in producing growth in animals than meals prepared at low temperature.

In preparing new process meal the extracted flakes (ground beans with most of the oil removed) are heated, both indirectly by jacketed steam and directly by live steam, while in the old process and expeller methods the heat treatment is applied to the ground soybeans with the original oil intact. This is the reason why new process meal, altho properly cooked, is light colored while old process and expeller meals are brown in color, if the beans have been properly heated.

The quality of soybean oil meal resulting from the new continuous method of solvent extraction should not be confounded with the quality of meal which resulted when the old batch method was used. With our present equipment, the oil is extracted from the soybean in a most efficient way. The solvent is removed completely due to the type of solvent "hexane" which is used exclusively and the type of drying and aerating equipment. The fact that hexane is available today for such use is worthy of note. It certainly does its job efficiently and due to its low boiling point of about 150° F., is readily removed from our meal. A temperature of 210 to 220° F. is maintained in the driers, which completely removes the solvent and insures proper cooking of the meal. We know, as mentioned above, that our meal is properly cooked altho the temperatures required do not brown our meal.

New process soybean oil meal excels others, especially in its content of protein, i. e., 44% compared with 41% for old process and expeller meals. This means since new process meal is offered at the same price as other meals, that buyers are receiving a high quality protein for less money.

Another essential difference between the new process meal and others is that it contains

less oil, i. e., 1.0% compared with 4½ to 6% for old process and expeller meals. This point suggests, in view of the well known fact that soybeans due to their high oil content produce soft pork when fed to pigs, that our new process meal should be the safest meal for pigs.

Furthermore, we do not know of any sound reasons for leaving more than 1.0% of the oil in soybean oil meal since it is destined to be fed for the most part in combination with grains and their by-products. This assertion is based upon our knowledge of the requirements of all classes of livestock. Surely soybean oil meal will be used in liberal amounts in feeds for livestock because it furnishes a high quality protein at low cost.

Losses of Vitamin Potency

By J. S. HUGHES of Kansas State College

Since vitamin A is very easily oxidized, it is rapidly destroyed when added to mixed feed in the form of cod liver oil. One investigator reports a loss of from 40 to 100% in two weeks under ordinary conditions of storage. Any rancid fat in the feed acts as a catalyst, greatly accelerating the destruction of vitamin A. No doubt feed free from rancid fats and stored in a cool place would retain their vitamin A much longer than two weeks. When cod liver oil is used as a source of vitamin A, the feed should be mixed fresh at time of feeding. This is not true in the case of vitamin D, which is quite stable.

Carotene dissolved in oil and added to feed stored at 28° C. shows a loss of 24 to 68% in 16 weeks. When stored at 7° C. the loss was between 4 and 27% for the same period.

Anti-oxidants, which prevent oxidation when added to oil, do not seem to have much effect when the oil is added to mixed feed. More research should be done on this subject.

From 50 to 90% of the carotene content is lost during the ordinary methods of curing alfalfa hay. Alfalfa cut at 3 p. m. had lost 11% of its carotene by 10 a. m. of the next day. This sample lost an additional 7% during the process of dehydration. A sample of dehydrated alfalfa lost 60% of its carotene from July to November when stored under ordinary conditions. During the winter months, because of lower temperatures, the loss is not very rapid.

From 25 to 50% of the carotene is lost in the ordinary or molasses method of producing silage. By the A. I. Virtanen method of making silage no carotene is lost. In this method acid is added which prevents fermentation.

A new method for conserving the high vitamin A potency of young grass for poultry feeding has recently been introduced. It consists of condensing chopped grass with buttermilk to the consistency of semi-solid buttermilk. The product is called "green buttermilk."

When live stock are on pasture or receive high quality forage there is no danger of a vitamin A deficiency. When low grade forage is used in dry lot feeding, vitamin A deficiency results. Improved methods of handling forage, of which the A. I. V. method is the most efficient, will eliminate vitamin A deficiency among live stock and will insure milk of high vitamin A potency.

Vitamin A deficiency among poultry seems to be quite common. Since chicks are started

almost entirely on commercial feeds, it is important to see that these starting feeds are adequate as to vitamin A potency. In most cases the chick receives nothing but the feed as it comes from the bag.

Iodine Experiments Continue

James W. Kellogg in an address before the Ass'n of Feed Control Officials, said:

"While it is true to some degree that we do not have complete standards or levels for iodine feeding, especially in the case of poultry, yet it is also true that we had no definite levels for feeding protein, calcium, phosphorus, limestone or cod liver oil, in the beginning of intensive feeding of these products, yet we kept on feeding them just the same. In the absence of complete experimental data, when we do know the absolute need for iodine feeding, we cannot afford to wait for further data in employing iodine as a nutrient in our present day feeds.


"Arrangements are now being made to conduct further nutrition experiments with iodized rations at the poultry department of Pennsylvania State college."

**CHECK
YOUR
FORMULAS**
with
**Laboratory
Analyses**

Protein, Fat, and Fibre
—Feed or Grain—
Analyzed at
Reasonable Rates
Runyon Testing Laboratories
1106 Board of Trade Chicago, Illinois
"Runyon Analyses Help Sell Feeds"

Triple XXX Alfalfa Meal

Use more of it—it's healthful



THE DENVER ALFALFA
MILLING & PRODUCTS CO.

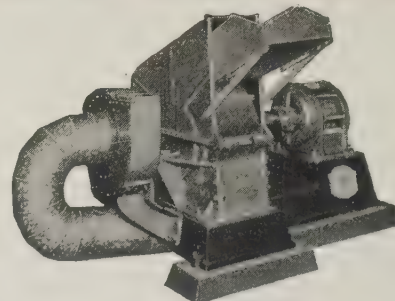
Merchants Exchange
ST. LOUIS

LAMAR, COLO.

GRUENDLER

1885 to 1936

Slow Speed and High Speed Feed Grinders still maintain lowest cost and highest quality feed and are making profits instead of just swapping dollars. Ask the feed miller who owns one.



Are you interested in establishing a complete feed grinding and mixing plant?

Write for Bulletin "Your Own Feed Plant"

**GRUENDLER
CRUSHER & PULVERIZER CO.**
2915 No. Market St. St. Louis, Mo.

Feedstuffs Movement in December

Receipts and shipments of feedstuffs at the various markets, during December, compared with December, 1935, in tons, were:

	Receipts		Shipments	
	1936	1935	1936	1935
*Baltimore	5,193	3,424	.....	.....
*†Boston	1,353	600	65	.....
*Chicago	8,838	9,017	36,023	28,904
Cincinnati	1,020	480	.....	.....
†Kansas City	8,450	3,200	24,425	22,206
Milwaukee	505	1,230	8,180	7,180
*Minneapolis	2,604	3,261	30,765	30,430
*Peoria	11,185	98,252	14,748	13,475
†San Francisco	.....	135	.....	.....
*Millfeed. †Bran and shorts.	.....	.....	.....	.....

Hay Movement in December

Receipts and shipments of hay at the various markets during December, compared with December, 1935, in tons, were:

	Receipts		Shipments	
	1936	1935	1936	1935
Baltimore	404	26	.....	.....
Boston	1,177	539	.....	.....
Chicago	4,181	2,435	850	466
Cincinnati	1,628	374	.....	.....
Ft. Worth	275	121	.....	.....
Kansas City	5,628	4,776	1,056	984
Minneapolis	401	108	15	.....
Peoria	1,310	30	60	40
San Francisco	668	108	.....	.....
St. Louis	900	492	300	288
Seattle	55	154	.....	.....

Poultry Feeds and Feeding

Wenatchee, Wash.—North Central Washington's annual poultry show was held Jan. 5-9.—FKH.

Dodge City, Kan.—The 48th annual Kansas poultry show will be held here Jan. 11-16. For the first time the show is being held in western Kansas.

Philadelphia, Pa.—The Pratt Food Co. has been ordered by the Federal Trade Commission to desist from claiming that its "Pratt's Split Action N-K Capsules" will destroy all worms including tapeworm heads with which poultry may be infested.

Feeding laying mash to hens all the year around, summer as well as winter, pays in the number of eggs produced. University of Wisconsin tests have shown that hens eating mash the year around lay one-third more eggs than those receiving the laying mash only during the winter months.

December's Poultry Report

The number of layers in farm flocks on Dec. 1 showed a 3% increase above a year ago, according to reports of the Bureau of Agricultural Economics. Pullets on hand for layers showed a gain of 5%. An indicated gain of between 3 and 4% in the size of laying flocks appeared as remaining from the earlier reports of a 12% gain in the number of potential layers.

This slight increase in the number of layers brought the total of egg production to about the same as a year ago.

Cold storage holdings of poultry, including turkeys on Dec. 1 were approximately 150,000,000 pounds, compared with 86,000,000 pounds on the same date a year ago.

Why Oat Hulls Are Valuable in Poultry Feed

By J. E. HUNTER of Pennsylvania State College

Minerals have received considerable attention in recent years and have been highly exploited. A number of mineral elements are required by poultry but most of them are furnished by other ingredients used in the ration. With the exception of calcium and possibly manganese it is seldom necessary under conditions in this State to add minerals to the ration. Chicks require calcium and phosphorus in liberal quantities for the building of bone. If ample quantities of animal protein products are used in the feed, it is seldom necessary to add additional phosphorus. Enough calcium is usually added to bring the calcium: phosphorus ratio to 1.5:1 or 2:1. Most poultrymen keep some form of calcium before the birds at all times and this eliminates the possibility of a calcium shortage. A rather fine adjustment of the calcium and phosphorus content of a mash for chicks is essential. Too little of these materials may result in rickets and a too liberal supply may result in perosis which is sometimes referred to as slipped tendons or hock disease.

Recent work at Cornell University has thrown considerable light on the question of perosis. They have demonstrated that very small quantities of manganese has a very beneficial effect in preventing perosis. This work undoubtedly explains why materials such as oat hulls, rice bran and wheat by-products tend to lessen the incidence of perosis. These materials have an appreciable content of manganese. Ways and means by which the feed manufacturer may be assured of ample manganese in feeds have not been definitely established. It is not known at the present time whether it will be more advisable to add very small quantities of a manganese salt to the feed mixture or whether it will be more feasible to rely on feed ingredients that contain an appreciable quantity of this element.

Packing-House Byproducts Valuable in the Poultry Diet

Harry W. Titus and others, in the Journal of Agricultural Research, have reported on a study of the effects of packing-house byproducts in the diet of Single-Comb Rhode Island Red pullets on the production and hatchability of eggs. Data were likewise obtained on the effect of such products on live weight, feed consumption, egg weight, and embryonic mortality.

The packing-house byproducts used in the tests included various kinds of meat meal, meat-and-bone meal, beef scrap, blood meal, and stick. These were tested as individual products and several were used in various combinations. The experiment likewise involved comparisons of the effects of different methods of cooking all-beef scrap.

In general, the egg production of birds on diets containing packing-house byproducts was materially higher than that of birds on the basal diet containing no supplement. Egg production resulting from the feeding of packing-house byproducts was somewhat higher than on diets containing a meat-fish-milk supplement known to be efficient in this respect.

In general, the packing-house byproducts, besides supporting reasonably good egg production, resulted in satisfactory hatchability, ranging in most cases between 70 and 80%. Decreased hatchability, when encountered, was rather closely associated with an increased second-week embryonic mortality. In the case of the diets containing a specially prepared all-beef scrap, this second-week embryonic mortality was almost negligible.

Liquid stick and a mixture of blood meal and stick led to an increase of embryonic mortality throughout the incubation period and the increase was especially noticeable during the third week.

In their effect on live weight, the packing-house byproducts were about equal. All the byproducts permitted the birds to reach approximately the same average maximum live weight as the meat-fish-milk supplement and the weights of the birds were reasonably well maintained to the end of the experiment.

In their effect on feed consumption per egg produced, the packing-house byproducts were slightly more efficient than the meat-fish-milk supplement. In effect on egg weight, this supplement produced slightly heavier eggs than the packing-house byproducts tested. Most of the packing-house byproducts enabled the birds to produce eggs of satisfactory weight and size. The birds receiving liquid stick produced the smallest eggs. Those receiving a mixture of blood meal and stick and those receiving meat-and-bone meal containing no added blood meal or stick produced relatively small eggs.

The studies indicate that the materials used in making good meat scrap and similar products are relatively more important than the temperature and the time of processing so long as the temperature does not exceed 200° F. or the time of processing 8 hours. Higher temperatures were not studied.

The experiments indicate the commercial possibility of producing excellent packing-house byproducts from the point of view of good hatchability as well as good production. A formula which was found to produce generally satisfactory results consisted of: Carcasses 20%, livers 10, spleen 10, skulls 10, beef rennets 15, trimmings 10, hashed pecks 15, and beef-cutting scrap 10.

In general, the experiments confirm previous evidence regarding the value of protein supplements of animal origin, and direct attention to opportunities for improving such supplements by the development and use of suitable formulas and controlled methods of manufacture.

Game Birds Require High Protein

Ring-necked pheasant chicks made maximum gains on a 30% protein level, adequate in vitamin G, in experiments at the New York State game farms, reported by Norris, Elmore and Ringrose, Cornell University.

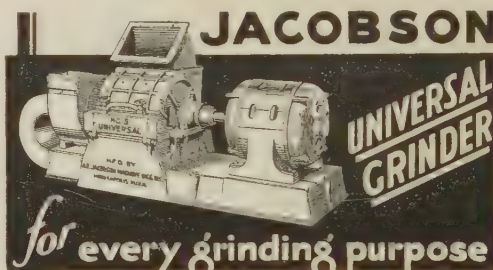
Increases in the protein level from 15% to 27% gave marked increases in growth, but added gains with protein levels carried as high as 33% were not considered significant.

The 30% protein level produced average weight in pheasant chicks of 464.3 grams at 8 weeks of age. The gain per gram of feed at this level was .38 gm., per gram of protein, 1.28 gm. The 15% protein level produced the

EAR CORN AND SMALL GRAIN HAMMER MILL FEEDER



Crushes, mixes and feeds. Variable flow control. Steady uniform output. Tramp metal protection.
Nickle Eng. Works
Saginaw, Michigan



Here is the mill that combines lasting durability and remarkable grinding quality.

Write us for full information. Let us tell you more about this hammermill which you must eventually buy.

ALSO

Vertical Feed Mixers
Electro Magnetic Separators
Corn Cutters

Corn Shellers Crushers
A complete feed mill machinery line
... reasonably priced.

A.E. JACOBSON MACHINE WORKS, INC.
1084 TENTH AVE. S.E. MINNEAPOLIS, MINN.

Poultry Production

by Lippincott and Card

(5th Edition—Revised)

Every elevator that grinds and mixes poultry feeds needs this new, quick-reference volume, devoted to practical management of poultry enterprises. Prepared by noted authorities, it includes 238 illustrations. Considers culling, prevention and cure of diseases, incubation, brooding, housing, ventilation, etc., and gives 63 pages to selection and compounding of feeds, to feeding methods and the nutrient requirements of poultry.

Bound in cloth, 723 pages, fully cross indexed. Weight 4 lbs. Price, \$4.00, plus postage.

Grain & Feed Journals

Consolidated

332 S. La Salle St. Chicago, Ill.

highest gains per gram of protein (1.94 gm.), but the lowest gains per gram of feed (.29 gm.).

Maximum gain per gram of feed showed at the 24 to 27% protein levels. It was concluded that the minimum protein requirements of pheasant chicks is 24%, if excellent growth is to be made without undue forcing. Using this protein level will minimize danger of trouble from possible other nutrient deficiencies which may occur at the high protein forcing levels.

Feeding Questions Answered

By R. O. KLEPINGER

A Drouth Formula

Mr. Klepinger: What would you suggest as a laying mash formula for western Missouri territory that is very short of corn, but raised good crops of soft winter wheat and oats, of which there are plentiful supplies?—Sam Wilson.

Ans.: I would suggest mixing 400 lbs. coarse ground wheat, 200 ground oats, 150 soybean meal, 100 meat scraps, 50 bran, 70 alfalfa meal, 20 limestone, 10 cod liver oil. This formula is about 19% protein, 3½% fat, 7% fibre.

Changing Feed of Hens

Mr. Klepinger: Since common farm flocks of hens are permitted to run on free range during the summer months, presumably picking up a good deal of nourishment in the form of bugs, etc., but have no opportunity to do this in the winter time, should their regular feed in the winter contain more protein than their regular feed in the summer? Should adjustment in feed formulas be made to cover this factor of free range?—O. W. Fitch.

Ans.: I doubt very much the wisdom of making any change between winter and summer egg mash formulas. It is quite true that poultry on range may pick up bugs, etc., but they also pick up quite a lot of grass, and being away from a feed hopper, the total intake of protein would no doubt be less than if eating out of the mash hopper. I feel that the regular mash should be before the birds all the time, to make sure of sufficient intake of protein.

Hens consume less grain during the warm months than during the winter months, but, of course, the need for grains is not so great then. Winter conditions require a higher intake of carbohydrates to keep up body heat and activity.

Eggs Affected by Cottonseed Cake

The Danish National Egg Com'te has had its attention directed to eggs with badly colored, spotty yolks which were thought to be due to the excessive use of food mixtures primarily intended for cattle and containing a great deal of cottonseed cake. The com'te accordingly requested the Agricultural Laboratory to investigate the question. This was done and a report on the matter has been issued.

A flock of 10 brown Leghorns were isolated in a house which had a grass run attached to it. They were fed with "Lundgaard Mixture" to which was added 65 grammes of corn. When it had been found that the eggs produced on this dietary were of a normal color, finely-ground cottonseed cake was mixed, first in the proportion of 25% and then 50% with the original ration. When the latter quantity was used the hens disliked the food and the eggs diminished in size and became fewer in number after about a week.

After the birds had been fed for four or five days on food containing the larger proportion of cotton cake the egg yolks began to assume a dirty grayish-brown color with dark brown veined patches. The membrane enclosing the yolk was thick, shiny and tough. The contents of the yolk were normal in some cases and in others of a greyish color and tough consistency. The whites were usually clear, though abnormally gelatinous. In some cases the whites were turbid and brownish with white or yellow particles. The eggs, when broken, had a disgusting appearance and had to be regarded as useless for human food.

The Egg Com'te, therefore, warns fowl own-

ers against the use of cattle feed mixtures containing large proportions of cotton seed cake, as such feeding will spoil the quality of the eggs. The com'te also points out that much harm would be done by the exportation of eggs of the kind described.

Vitamin A Requirements of Chickens

By DR. R. T. PARKHURST before New England Poultry Producers

When feeds are mixed previous to the feeding period, the minimum vitamin A requirements of chickens to eight weeks would appear to be in the vicinity of 150 U. S. P. vitamin A units per gram (680 units per pound) and the practical requirement for satisfactory growth and liver storage about 300 units per 100 grams of feed (1,362 units per pound). For chickens to 30 weeks of age, the requirement may be double. Turkeys apparently require at least double the amount of A in their ration as do chickens.

To meet the requirements of 300 vitamin A units per 100 grams of feed would require, with an otherwise A-free ration one-half of 1 per cent of a 600 unit cod liver oil, one-tenth of 1 per cent of a vitamin A and D concentrate in cod liver oil containing 3,000 vitamin D units per gram, 37.5 per cent of yellow corn meal of five gamma of beta carotene equivalent or about 3 per cent of an alfalfa leaf meal of 65 gamma carotene per gram.

Research at the New Jersey Agricultural Experiment station indicates 750 vitamin A units per 100 grams of feed (3,400 per pound) to approximate the optimum requirements of layers.

Dr. Hughes, of Kansas Agricultural college has reported that 1,000 to 1,500 units of vitamin A per 100 grams of feed are indicated as needed to produce eggs of high vitamin A potency. This is in agreement with the Texas Experiment station studies.

Unpublished data from the Nopco experiments indicate the minimum vitamin A requirements of single comb White Leghorn breeders to be between 300 and 600 vitamin A units per 100 grams of feed (1,360-2,720 units per pound). Further studies, however, are needed to determine the exact requirements of breeders.

To summarize, a minimum requirement of 400 vitamin A units and an optimum requirement of 750 units per 100 grams of total feed is indicated for laying hens for sustained egg production and hatchability. One quarter of 1 per cent of a vitamin A and D concentrate in cod liver oil of 3,000 U. S. P. units of vitamin A per gram or 1¼ per cent of a cod liver oil of 600 vitamin A units potency would meet the productive needs of layers and probably breeders. More of fish oils of lower potency would be required. Further studies are needed before we know the exact requirements.

Chickens consume more than twice as much feed as the same weight of cattle, yet they cannot efficiently use roughages.

Poultry do not seem to need vitamin C. This vitamin is known as the anti-scorbutic vitamin. Vegetables are almost its only source.

The protein supplement fed to laying hens has no material effect on the physical character of the interiors of the eggs, concludes studies of D. F. Sowell, and C. L. Morgan at South Carolina's experiment station.



Corn Gluten Feed, Corn Oil Cake Meal,
Brewers' Dried Grains Malt Sprouts
ANHEUSER-BUSCH ST. LOUIS

Pneumatic Handling of Fish Meal

The pneumatic system of handling bulk commodities has been adapted to handling fish meal.

Due to the danger of fish meal causing spontaneous combustion in the holds of vessels off shore the Polarine, a sardine reduction vessel launched off the California coast late in November, carried a pelleting machine for turning the sardine meal into pellets before dropping in the holds. With the meal in pellet form air could be circulated thru the holds to prevent its heating.

For unloading a pneumatic rigging was set up on shore, with a long nozzle to reach down into the holds, draw the pelleted meal out, and blow it direct into box cars in bulk for convenient shipment.

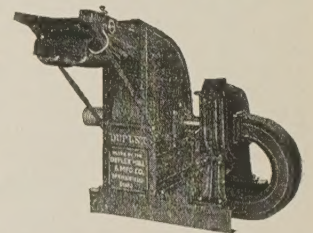
Washington, D. C.—The Kentucky unemployment compensation law has been approved by the Social Security Board.

KELLY DUPLEX

MILL MACHINERY

A New
HAMMER
MILL

with a
remarkable
efficiency
record.



Write for details.

Everything for Mill and Elevator

The Duplex Mill & Mfg. Co.
SPRINGFIELD, OHIO

Practical Poultry Farming

By L. M. Hurd

This revised and enlarged edition is right up-to-date and contains all important discoveries in poultry raising made in recent years.

The book contains the latest information on feeding, a complete discussion of the new vitamin G, practical information on the two-story poultry house and heating, disinfecting incubators, battery brooding and raising chicks on screened platforms, and the latest discoveries in treating pests and diseases, including Leukemia, and the newest information on disinfecting houses. This edition also describes the new methods of feeding turkeys.

Printed on enamel book paper from large type and well bound in cloth. 480 pages, 33 chapters, and 200 engravings. Weight 2 lbs. Price \$2.50 plus postage.

Grain & Feed Journals

Consolidated

332 S. La Salle St.

Chicago, Ill.

Vitamin D in Cacao Shell

Feeding two pounds of cacao shell daily to dairy cows raised the vitamin D content in their milk from a winter to a summer level in experiments at the National Institute, Reading, England.

Cacao shell, important by-product of chocolate manufacture, is rich in vitamin D, considered by the experimenters to be one-fourth as potent as an average cod liver oil.

The two pounds of cacao shell fed to four dairy cows in this experiment contained 32,000 I. U. of vitamin D.

Cacao shell normally runs from 15 to 18% protein, and a few samples have been noted that contain as high as 26% protein. Experiments in Germany point to this product as a reasonably rich protein food that may be used in feeding cattle.

Protein in Soybean Hay

At the Ohio Exp. Sta. Thatcher and Park found that the yields of protein per acre in the soybean hay have been consistently higher for the Manchu variety than for the Peking variety. The amount of protein per acre in the leaves, however, has been larger for the Peking variety after the first date of harvest in all 4 years and after the second date in 2 years. The amount of protein per acre in the stems of the Manchu variety shows a gradual decrease from the first to the last date of harvest. In the Peking variety there is first an increase, reaching a maximum at the third date (when the seeds are just beginning to form), followed by a decrease. In general, the amount of protein in the stems of Manchu was larger than in Peking, with the exception of the third and fourth dates of harvest when Peking was slightly higher. The amount of protein per acre in the seeds of Manchu was larger than in Peking for all dates.

Date harvested	(Pounds per acre)				
	Manchu (Ohio No. 1)		Plant parts		
	Total hay	Leaves	Stems and pods	Seeds	
	Lb.	Lb.	Lb.	Lb.	
Aug. 20-24	3588	1907	1655	26	
Aug. 30-Sept. 5 ..	4181	1809	1986	386	
Sept. 10-16	4580	1290	2202	1088	
Sept. 20-26	4787	862	2411	1511	
Oct. 1-6	4222	436	2170	1616	
Yields of protein in hay and plant parts					
Aug. 20-24	545	339	198	8	
Aug. 30-Sept. 5 ..	612	306	170	137	
Sept. 10-16	741	211	148	382	
Sept. 20-26	778	129	128	521	
Oct. 1-6	728	56	111	561	

Oyster Shell Needed in Pig Ration

The Texas Experiment Station is conducting a study to determine for fattening pigs the optimum amount of calcium for a ration balanced with a vegetable protein such as cottonseed meal or peanut meal.

Preliminary work at this Station has shown that a ration of yellow corn, cottonseed meal, and salt fed to 63-pound pigs would produce rickets in from 60 to 80 days, and that the addition of 2 pounds of limestone to this ration prevented the deficiency disease.

Two 90-day tests were conducted this year with pigs averaging 55 pounds initial weight. The rations used contained 1%, 1½%, and 2% of oyster shell flour, respectively. No cases of rickets developed among any of the pigs. The pigs getting the 1½% of oyster shell in the ration, however, gained 9 pounds per pig more than did the pigs getting only 1% of oyster shell flour. The economy of gain was also in favor of the 1½% oyster shell lot since they made 100 pounds of gain on 373 pounds of feed, as compared with a requirement of 385 pounds for the pigs getting only 1% of oyster shell. No advantage was obtained by feeding 2% of oyster shell flour in the ration.

New Feed Trade Marks

John Morrell & Co., Ottumwa, Ia., has filed trade mark No. 384,297, a red heart, for horse and cow feed.

Houston Packing Co., Houston, Tex., has filed trade mark No. 385,000, "Zep," in outline lettering, for dog food.

Whyte Feed Mills, doing business as Horse-shoe Dog Food Co., Pine Bluff, Ark., has filed trade mark No. 380,428, drawing of a horse-shoe resting on one point, and "horse-shoe VI-TANS" below it, for dog food.

New England Retail Grain Dealers Cooperative Ass'n, Springfield, Mass., has filed trade mark No. 382,926, a colored ring bearing the words "New England Quality" and inclosing a map of the New England states.

Farmers Cooperative Exchange, Raleigh, N. C., has filed trade mark No. 373,681, a triangular arrangement of "FCX," with "Purchasing," "Marketing," and "Cooperative" printed one word on each side, for dairy, poultry, dog, and stock feed, and for flour.

Jacques Wolf & Co., Passaic, N. J., has filed trade mark No. 382,852, the word "Protozyme" for enzymic preparation upon and within a cereal base for the decomposition and conversion of starches and/or proteins, and a product containing such preparation, such preparation and product being each for admixture especially with dog and other animal and poultry food materials.

Blindness from Vitamin A Deficiency

By F. HALE and H. SCHMIDT of Texas Experiment Station

The results of this study were first reported in the 1932 annual report of the Texas Station, page 91. In 1934, two other litters of blind pigs were produced by feeding two gilts a ration deficient in vitamin A for a period sufficient in length to practically deplete the body of vitamin A before they were bred. This was the first time that anyone had reported the duplication of litters of blind pigs as the result of maternal vitamin A deficiency.

In 1935, a similar litter of seven blind pigs was produced by another gilt, mated to a boar unrelated to the sires of the three previous blind litters. Other defects observed in this litter of pigs were hare lip, cleft palate, accessory ear-like growths at the base of the ear, malformed hind legs, and a failure of the kidneys to ascend from their embryonic position.

This year, definite and complete genetic tests were made in order to determine whether or not we were working with an hereditary anomaly already in the stock of pigs we were using. These tests including mating a blind male from one of the 1934 litters of blind pigs to (a) a normal, unrelated gilt, (b) mating the blind male back to his dam, and (c) mating the blind male to his blind full sister and littermate. From these three matings, 26 normal pigs and no abnormal pigs were farrowed.

These studies to date leave no reasonable doubt that a maternal deficiency of vitamin A will result in a variety of defects in the offspring, including blindness and even a failure of complete development of eye tissue, cleft palate, hare lip, and the arrested ascension of the embryo kidney.

Imports and Exports of Feeds

Imports and exports of feedstuffs during October and during the months ending with October compared with the like periods of 1935, as reported by the Bureau of Foreign and Domestic Commerce, were as follows, in tons of 2,240 lbs., except where noted otherwise:

	IMPORTS			
	October		10 months ending October	
	1936	1935	1936	1935
Hay*	11,063	233	37,703	66,882
Cocanut, c/m†	8,174,938	9,814,434	78,986,093	85,682,071
Soybean, c/m†	2,685,771	2,898,611	35,080,439	102,720,525
Cottonseed, c/m†	5,909,772	410,210	16,419,085	59,305,262
Linseed, c/m†	3,363,000	1,243,180	32,676,196	17,229,647
All other, c/m†	1,787,166	179,770	7,640,065	9,658,150
Wheat feeds	44,811	23,503	288,756	295,045
Tankage	3,776	5,763	41,862	24,050
Fish scrap	2,547	537	33,711	21,992
Beet pulp	4,819	2,526	23,177	24,439
	EXPORTS			
	October		10 months ending October	
	1936	1935	1936	1935
Hay	47	28	1,965	2,238
Cottonseed cake	1	1,828	1,958	2,470
Linseed cake	15,462	16,387	136,643	152,284
Other oil cake	259	.....	17,812	48
Cottonseed meal	891	331	3,271	1,718
Linseed meal	1,335	323	6,701	10,504
Other oil meal	615	2,551	24,319	7,378
Fish meal	699	1,142	4,123	16,917
Mixed dairy fds.	75	132	1,231	1,649
Mixed Pltry. fds.	85	79	1,480	1,262
Other mixed fds.	259	151	1,764	1,298
Other feed, bran	684	1,160	7,970	5,521
Kafir, milo, bus.	.....	.....	1,353	4,412
Oyster shells	6,298	5,826	48,532	38,239

*2,000 lb. tons; †pounds, of cake and meal.

BE PREPARED! HESS DIRECT HEAT DRIERS

ENABLE YOU TO HANDLE

NEW GRAIN WITHOUT LOSS

DON'T DELAY

WRITE FOR FREE CATALOG.

HESS WARMING AND VENTILATING CO.
1211 SO. WESTERN AVE., CHICAGO

**It Is Easy to Earn Greater
Twine Profit Selling
INTERNATIONAL
"BIG BALL" TWINE
with the PATENTED COVER**



High quality means satisfied customers.

Full stocks at International Harvester branches
—not necessary for you to carry a big supply.

The International Harvester name and reputation
stands behind every ball of International Twine.

International Twine is guaranteed for length,
strength, and weight. Treated against destruc-
tion by insects.

Farmers using McCormick-Deering Binders prefer
International Harvester Twine.

You'll find it an easy matter to place a
good volume of this high-quality twine
among your friends and customers, *at a
good profit.* Drop a line to the nearest
branch house, or direct to us at Chicago,
and we will have an International Har-
vester traveler call on you and give you
full details.

INTERNATIONAL HARVESTER COMPANY
606 So. Michigan Ave. (INCORPORATED) Chicago, Illinois

WHERE WILL A "FIREBUG" STRIKE NEXT?

Special Investigators from the Loss Investi-
gation Department of "The Mill Mutuals" em-
ploy all the modern methods of scientific crime
detection in protecting you against losses
caused by incendiaries.

* * * * *

A \$500 Reward Will Be Paid by the
Mutual Fire Prevention Bureau
for Information Leading to the
Arrest and Conviction of Any
Person or Persons Burning or At-
tempting to Burn Any Flour Mill
or Grain Elevator Insured in "The
Mill Mutuals".

* * * * *

Report Any Evidence of Attempts to
Burn or Destroy Such Property to the

MUTUAL FIRE PREVENTION BUREAU

Department of

**Association of Mill and Elevator Mutual
Insurance Companies**

230 East Ohio Street
Chicago, Illinois



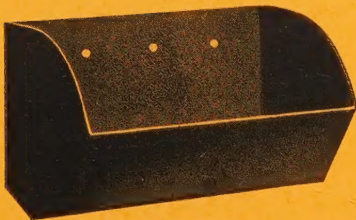
**ALWAYS
Uniform**

ORDINARY cod liver oils may vary several hundred
per cent in vitamin strength. By means of careful
standardization, checked by tests on chickens and rats,
CLO-TRATE is made uniform in vitamin A and D con-
tent. Regardless of the season, CLO-TRATE is always
the same in feeding value. That is one of the chief
reasons why CLO-TRATE is producing outstanding
results.

HEALTH PRODUCTS CORPORATION
NEWARK, N. J. DEPT. 6-A CHICAGO, ILL.

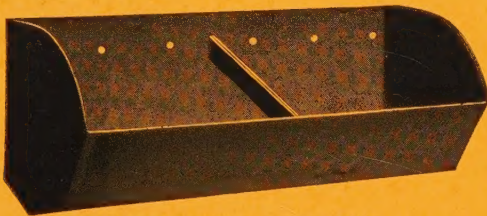
Elevating and Conveying Equipment that is **MODERN!**

HAMMOND BUCKETS



HAMMOND "DP"

- No change in dimensions
- Greater strength and longer service
- One-piece sturdy construction
- Heavier gauge steel to resist wear
- Perfectly smooth inside and out
- No bands to interfere with pick-up or discharge
- Lighter weight — less belt wear



HAMMOND "DP" WITH BRACE

Hammond Buckets are the same long accepted design—MODERNIZED. Streamline one-piece construction. Perfectly smooth inside and out with no bands. Heavier gauge, greater in strength, but lighter in weight. Offering more flexibility in adapting to variable speeds and spacing on present equipment. Increase capacity, efficiency—save belts—lower replacement and maintenance costs. Made in all standard sizes in both the Hammond "DP" and Hammond "OK" types. Send for samples. We also manufacture Minneapolis "V," Heavy "V," Buffalo, Rialto, Steel Grain, Steel Ear Corn, Tin Mill Elevator Buckets.

CALUMET SCREW CONVEYORS



Every type and size—with improved advantages not found in other screw conveyors which mean savings in replacement costs, power, maintenance.

CALUMET ELEVATOR BOLTS



Offering many distinct advantages which effect substantial savings in maintenance costs. Calumet Bolts avoid premature belt wear and deterioration. They distribute bucket weight over large area of belt—large head prevents pulling through belt—conical point makes punching of holes unnecessary—preventing cutting, fraying, or ravelling of belt fabric. All $\frac{1}{4}$ " diameter sizes in stock. We also manufacture Norway flat-head and Reliance slotted-head Elevator Bolts.

Calumet Elevating and Conveying Equipment and Accessories retain all the basic features traditionally accepted by the industry, but are vastly improved in design and construction through modern engineering standards. Simplicity and streamlining constitute the major improvements we have incorporated.

In our progressive advance toward the new and better, we have taken advantage of everything which gives greater efficiency and lower costs. Inaugurating entirely new standards, new production equipment, and a younger, more energetic personnel, we are keeping pace with that Modern Progress exemplified in all major industries today. If you are considering repairs or the purchase of new screw conveyors or bucket elevator installation, it will pay you to specify the Modern Calumet Line. Our long experience is at your disposal in adapting Calumet Products to your specific needs.

Dealers and Stocks at all elevator and milling centers.



STYLE NO. 17
For Wood Box



STYLE NO. 18A
For
Wood or Steel Box

STREAMLINED HANGERS

Streamlined design habitted bearings — these hangers offer minimum resistance to movement of material. No material can lodge between main frame and "U" bolt. A big improvement over style of hangers heretofore used. Easily accessible bearing cap, above material conveyed. Standard sizes in stock — also other types.

Screw Conveyor Corporation

702 HOFFMAN ST.

HAMMOND, IND.

SCREW CONVEYORS

CALUMET

ELEVATOR BUCKETS

PRODUCTS